

NAVAL POSTGRADUATE SCHOOL

Monterey, California



THESIS

A CLASSIFICATION AND ANALYSIS OF
NATIONAL CONTRACT MANAGEMENT JOURNAL
ARTICLES FROM 1966 THROUGH 1989

by

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June 1991

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T256366

REPORT DOCUMENTATION PAGE

Form Approved
OMB No 0704-0188

a. REPORT SECURITY CLASSIFICATION Unclassified			1b. RESTRICTIVE MARKINGS			
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; Distribution is unlimited			
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE						
4. PERFORMING ORGANIZATION REPORT NUMBER(S)			5. MONITORING ORGANIZATION REPORT NUMBER(S)			
6a. NAME OF PERFORMING ORGANIZATION Naval Postgraduate School		6b. OFFICE SYMBOL (If applicable) AS		7a. NAME OF MONITORING ORGANIZATION Naval Postgraduate School		
6c. ADDRESS (City, State and ZIP Code) Monterey, CA 93943-5000			7b. ADDRESS (City, State, and ZIP Code) Monterey, CA 93943-5000			
8a. NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER		
8c. ADDRESS (City, State, and ZIP Code)			10. SOURCE OF FUNDING NUMBER			
			PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) A CLASSIFICATION AND ANALYSIS OF NATIONAL CONTRACT MANAGEMENT JOURNAL ARTICLES FROM 1966 THROUGH 1989						
12. PERSONAL AUTHORS DAVID ALAN SMITH						
13a. TYPE OF REPORT Master's Thesis		13b. TIME COVERED FROM _____ TO _____		14. DATE OF REPORT (Year, Month, Day) June 1991		15. PAGE COUNT 342
16. SUPPLEMENTARY NOTATION The views expressed are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government						
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block numbers)			
FIELD	GROUP	SUB-GROUP	Contracting Literature, Contracting Literature Taxonomy, Taxonomy, Classification of Contracting Literature, National Contract Management Journal			
19. ABSTRACT (Continue on reverse if necessary and identify by block numbers) This thesis was an attempt to classify, analyze, and summarize a selected, finite body of acquisition and contracting literature. The primary objective of this thesis was to apply an existing taxonomy to the complete library of a publication that is representative of contracting literature. Analysis of the results of this classification effort provided conclusive information about focal points and trends in the literature and the evolution of the contracting discipline. A secondary objective of this thesis was to evaluate the effectiveness and usefulness of the taxonomy used to classify the literature. This evaluation included a recommendation for improving the taxonomy. The final objective of this thesis was to compile an annotated bibliography of all the articles printed in this publication. Each bibliography included a summary of how the article was classified after applying the taxonomy.						
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT XX UNCLASSIFIED/UNLIMITED SAME AS RPT DTIC USERS				21. ABSTRACT SECURITY CLASSIFICATION Unclassified		
22a. NAME OF RESPONSIBLE INDIVIDUAL D.V. Lamm			22b. TELEPHONE (Include Area Code) (408) 646-2775		22c. OFFICE SYMBOL AS/Lt	

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A Classification and Analysis of
National Contract Management Journal
Articles from 1966 through 1989

by

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Submitted in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
June 1991

ABSTRACT

This thesis was an attempt to classify, analyze, and summarize a selected, finite body of acquisition and contracting literature. The primary objective of this thesis was to apply an existing taxonomy to the complete library of a publication that is representative of contracting literature. Analysis of the results of this classification effort provided conclusive information about focal points and trends in the literature and the evolution of the contracting discipline.

A secondary objective of this thesis was to evaluate the effectiveness and usefulness of the taxonomy used to classify the literature. This evaluation included a recommendation for improving the taxonomy.

The final objective of this thesis was to compile an annotated bibliography of all the articles printed in this publication. Each bibliography included a summary of how the article was classified after applying the taxonomy.

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I. INTRODUCTION

A. BACKGROUND

This thesis is an attempt to classify, analyze, and summarize a selected, finite body of acquisition and contracting literature. The results should provide conclusive information about focal points and trends in the literature and the evolution of the contracting discipline. This information should assist the acquisition and contracting community in determining where past research has concentrated and where future research may be required.

B. OBJECTIVES

The primary objective of this thesis is to apply an existing taxonomy to the complete library of a publication that is representative of contracting literature. An analysis of the results of this classification effort should provide a more complete understanding of the trends and patterns in the literature reviewed.

With this understanding the researcher induced conclusions about the entire body of contracting literature. And, since it is generally accepted that literature published about a particular profession reflects developments in that profession, the results should provide useful knowledge about the evolution of the acquisition and contracting field.

A secondary objective of this thesis is to evaluate the effectiveness and usefulness of the taxonomy used to classify the contracting literature. This evaluation should include suggestions, if necessary, to improve the taxonomy.

The final objective of this thesis is to compile an annotated bibliography of all the articles printed in this publication. Each bibliography should include a summary of how the article was classified after applying the taxonomy.

C. RESEARCH QUESTION

The primary research question of this thesis is:

- What would be the results of classifying the literature presented in the *National Contract Management Journal* from Volume 1, Number 1 (early 1966) through Volume 23, Issue 2 (late 1989), and what patterns and trends in the literature could be discovered in an analysis of the results?

The subsidiary research questions of this thesis are:

- To what extent does the application of Sweeney's Taxonomy to a large body of contracting literature sustain Sweeney's thesis conclusion that the taxonomy is an effective and useful system?
- Does the application of Sweeney's Taxonomy to a large body of contracting literature suggest how the system might be improved?
- To what extent does a statistical analysis of the results of the classification of this literature provide information on where most contracting literature has focused?
- To what extent does a time-series analysis of the results of this classification indicate trends in the literature?

- To what extent does an analysis of the results of the classification of this literature provide information on the evolution of the acquisition and contracting field?
- What would be the results of compiling an annotated bibliography of the literature presented in the *National Contract Management Journal* from 1966 through 1989?

D. SCOPE, LIMITATIONS, AND ASSUMPTIONS

1. Scope

A 1989 Naval Postgraduate School, Monterey, thesis by R.F. Sweeney, titled "A Classification and Analysis of Contracting Literature," developed a taxonomy for contracting literature. The taxonomy, hereafter referred to as Sweeney's Taxonomy, was applied to five years (1984-1988) of literature from the *National Contract Management Journal*. Sixty-seven articles were classified, analyzed, and summarized in an annotated bibliography.

Sweeney's Taxonomy appears to be an effective method for classifying contracting literature and is easily applied. However, the limited size of the sample categorized did not permit Sweeney to draw valid conclusions regarding the focus of contracting literature (Sweeney, 1989, p. 60).

The scope of this thesis focuses on the application of Sweeney's Taxonomy to the complete library of 413 articles published in the *National Contract Management Journal*, from 1966 through 1989. Analysis of the results of classifying the literature should yield information of value to the

acquisition and contracting community. A comprehensive annotated bibliography of the articles should aid the community in the performance of research.

Sweeney's Taxonomy was not designed to classify articles by subject, author, or title (Sweeney, 1989, p.3). For this study, the taxonomy will be expanded to permit indexing by subject; this should yield additional information and increase the usefulness of the bibliography to researchers. The subject index assigned to each article will coincide with one of the 69 National Contract Management Association Body of Knowledge modules listed in Appendix A.

The scope of this research effort is limited by Sweeney's research efforts in two ways. First, his analysis of the literature for the period 1984-1988 will not be repeated. However, his results are incorporated into the larger sample for analysis and inclusion in an annotated bibliography.

Second, the articles Sweeney analyzed were assigned subject indexes consistent with their classification in the *National Contract Management Journal Cumulative Subject, Author, and Title Index*, published by the National Contract Management Association in 1989. Fourteen of the articles reviewed by Sweeney are not listed in the index; these articles were reviewed for subject matter content. This approach was considered appropriate to avoid reviewing articles previously analyzed by Sweeney.

Another limitation on the scope of this thesis is the decision of this researcher to specifically limit application of the taxonomy to the *National Contract Management Journal* library. The primary purpose of this research is to yield information about focal points and trends in contracting literature. This purpose is best served by the analysis of a large sample of representative, continuous, literature that is gathered over a sufficient period of time. The *National Contract Management Journal* is a representative publication of contracting literature:

This publication was chosen since it is the premier channel through which contracting knowledge has been disseminated throughout the contracting community. Its works are the most scholarly and highly respected in the field. (Sweeney, 1989, p. 4)

Analysis of the complete library of this literature, published over a twenty-four year period, should serve the purpose of this research.

Analysis of the entire body of contracting literature is beyond the scope of this thesis, for the same reasons stated by Sweeney:

It would be impracticable to attempt to apply the taxonomy to all contracting literature. First of all, there is no single source or record of all contracting literature. Such literature can be found in books, articles, studies, etcetera. Second, time constraints require some limit on the volume of literature to which the classification scheme will be applied. (Sweeney, 1989, p. 4)

2. Limitations

Due to the scope limitations imposed by this researcher, external factors did not impede the completion of this thesis.

3. Assumptions

There were no significant assumptions made in the performance of this research.

E. LITERATURE REVIEW AND METHODOLOGY

This study is primarily an extension of the research effort presented in R.F. Sweeney's 1989 Naval Postgraduate School, Monterey, Master's Degree thesis titled "A Classification and Analysis of Contracting Literature." Sweeney's primary objective was to develop a classification scheme that went beyond simply indexing the literature by author, title, or subject (Sweeney, 1989, p. 1).

Sweeney's research efforts were similar to the research efforts of Alvin J. Williams and A. Ben Oumlil. Their study, titled "A Classification and Analysis of JPMM Articles," was published in the Fall, 1987, *Journal of Purchasing and Materials Management* (Williams, 1987). The primary objective of the Williams and Oumlil study was to classify the entire library of *Journal of Purchasing and Materials Management*. Their classification system included indexing by subject matter.

The *National Contract Management Journal Cumulative Subject, Author, and Title Index* contains 69 topic area modules which represent the acquisition and contracting field body of knowledge. The modules provided the basis for expanding Sweeney's Taxonomy to include a subject index.

This study consisted of two phases. The first phase was to apply Sweeney's Taxonomy, expanded to include subject indexing, to all articles in the *National Contract Management Journal* Volume 1, Number 1 (1966) through Volume 17, Issue 2 (1983); and Volume 23, Issues 1 and 2 (1989). Each article analyzed was also summarized in an annotated bibliography. This phase concluded with the indexing of Volume 18, Issue 1 (1984) through Volume 22, Issue 2 (1983), literature previously analyzed by Sweeney.

The second phase was a statistical analysis of the results of applying the taxonomy. This analysis included a static analysis of the classification categories and a time-series analysis.

F. DEFINITIONS

The following definitions are provided to distinguish between a taxonomy and a classification system (Sweeney, 1989, p. 6).

- Taxonomy -- the theory and practice of delimiting and classifying different kinds of entities. It includes the classification system itself, the theory used to build it and the methods used to construct it.

- Classification -- the development of a system to enable researchers to arrange entities into taxa based on their similarities, differences, and relationships to one another.

G. ORGANIZATION OF STUDY

This thesis will be presented in four chapters and four appendices. Chapter I presented a general introduction to the research effort, including its background, objectives, scope, methodology, and organization.

Chapter II is a description of Sweeney's Taxonomy, including its expansion to include indexing. The organization of the acquisition and contracting Body of Knowledge Modules is discussed. The expanded taxonomy is also presented.

Chapters III and IV are analyses of the results of applying the expanded taxonomy to the complete library of the *National Contract Management Journal*. Chapter III is a summary analysis of the number of articles assigned to the various categories. Chapter IV is a time-series analysis which evaluates the results in four six-year intervals.

Chapter V presents conclusions and suggests recommendations based on the foregoing analyses. Requirements for further research are also discussed.

Appendix A is a listing of the acquisition and contracting Body of Knowledge modules.

Appendices B, C, and D include an annotated bibliography of the *National Contract Management Journal* library from 1966

through 1989. The cumulative bibliography is divided to reflect the individual efforts of Sweeney and this researcher and to present it in chronological order.

II. CONTRACTING LITERATURE TAXONOMY

A. INTRODUCTION

The traditional approach to classifying literature is to group the literature by subject matter. This approach is practiced by most libraries, where publications are typically classified by subject, title, and author. It is also widely used by publishers of journals, periodicals, reference magazines, and so forth, to classify the material in a particular publication. One example is the subject index on the last page of each issue of *Consumer Reports*, a monthly publication of Consumers Union.

Another example is the *National Contract Management Journal Cumulative Subject, Author, and Title Index*, published by the National Contract Management Association. This index classifies nearly 400 articles published in the *National Contract Management Journal* from 1966 to 1988.

An analysis of this subject, author, and title index could yield valuable information about the acquisition and contracting field. For example, analysis might determine which subjects have been emphasized and/or neglected in the literature. This researcher has no knowledge of the existence of a subject matter analysis of a publication dedicated to the acquisition and contracting field.

However, this type of analysis was performed on a publication dedicated to the purchasing and materials management field. Williams and Oumlil classified 472 articles published in the *Journal of Purchasing and Materials Management* from 1965 to 1986 (Williams, 1987). Their analysis of the results provides valuable information about the purchasing and materials management field.

Williams and Oumlil did not limit their efforts to classification by subject matter only. They expanded their classification system to include classification by type and nature of article. The expansion of their classification system provides greater insight into the purchasing and materials management field; it represents an improvement of the traditional subject matter approach to classifying literature.

The Williams/Oumlil approach was the only classification system of literature (other than the traditional subject matter approach) discovered by Sweeney during the conduct of his research to develop a taxonomy for contracting literature (Sweeney, 1989, p. 16). Sweeney recognized the value of the Williams/Oumlil approach in his efforts to develop a taxonomy. He believed that it could be modified and used as a system for classifying contracting literature (Sweeney, 1989, p. 24). The result of Sweeney's modification of the Williams/Oumlil approach is Sweeney's Taxonomy.

This chapter will discuss the development and expansion of Sweeney's Taxonomy. It will be presented in two sections. The first section will discuss the development of Sweeney's Taxonomy. First, the Williams/Oumlil approach will be described. Second, highlights of the theory upon which Sweeney based his evaluation and modification of the Williams/Oumlil classification system will be presented. Third, the modified classification system, Sweeney's Taxonomy, will be described.

The second section will discuss the expansion of Sweeney's Taxonomy to include subject matter classification. First, the reasons for expanding the taxonomy will be discussed. Second, the subject matter index to be used in the expanded taxonomy, the National Contract Management Association Body of Knowledge modules, will be described. Finally, the expanded taxonomy will be presented.

B. DEVELOPMENT OF SWEENEY'S TAXONOMY

1. Williams/Oumlil Approach

This research effort closely parallels the research efforts of Williams and Oumlil to summarize and classify the complete library of articles published in the *Journal of Purchasing and Materials Management*. Their goal was to develop a classification system, apply it to the literature, and analyze the results. The information generated by their research could then be used to refine and expand the discipline:

An exercise of this type provides insight into the nature, scope, and dimensions of a body of thought. It allows researchers to accurately label and identify phenomenon as being purchasing-related. Parameters can be identified and boundaries can be placed around the discipline. Given the importance of understanding a discipline and the research contributions to that area, the objective...is to provide an approach by which greater understanding can be attained. (Williams, 1987, p. 1)

The approach developed by the authors to classify an article is a four-step process. The first step involves placing an article into one of four TYPE OF ARTICLE categories. The four TYPE categories are (Williams, 1987, p. 25):

- theoretical/conceptual
- managerial/practical
- case histories
- education/professionalism

Williams and Oumlil provide the following descriptions of the TYPE categories. Theoretical/conceptual articles have as their primary focus the elaboration or development of some principle or idea with potential application to the discipline. Managerial/practical articles explore or develop applications of basic concepts. Case histories are articles that address the activities of a specific industry or product/service areas. Education/professionalism articles address certification, academic opportunities, continuing education, and related matters. (Williams, 1987, p. 25)

✓ The second step involves placing an article into one of two NATURE OF ARTICLE categories. The two NATURE categories are (Williams, 1987, p. 25):

- positive
- normative

An article which is classified as positive is descriptive in nature; it describes the way things are. An article which is classified as normative is prescriptive in nature; it describes the way things should be.

3 ✓ The third step involves placing an article into a SUBJECT MATTER category. The authors derived the categories from the table of contents of leading textbooks on the field. A total of twenty-five categories were established.

4 ✓ The fourth and final step involves placing an article into a DATE OF ARTICLE category. A total of five unequal time intervals were established; two intervals were five years in length, and three intervals were four years in length.

Two implicit requirements of the Williams/Oumlil approach are: (1) that each article will be placed within a category group during each step, and (2) that each article be placed within a group on a mutually exclusive basis. For example, each article must be assigned to the NATURE OF ARTICLE group. However, an article could not be assigned to both the normative and positive categories within the NATURE OF ARTICLE category group. It must be one or the other, but

not both. These requirements are not explicitly stated in the Williams and Oumlil article. They are implied, however, in the presentation of their results (Williams, 1988, p. 25).

The results of Williams' and Oumlil's research provides valuable insight into the purchasing and materials management field. For example, their research indicates there has been heavy emphasis placed on the publication of theoretical/conceptual articles. This information leads them to conclude that "purchasing is constantly seeking new and different approaches to solve problems (Williams, 1987, p. 28)." A second example reinforces the value of their approach. Analysis of the subject matter classification results identifies areas in which minimal research has been conducted (Williams, 1987, p. 28).

2. Classification Theory

Commenting on the Williams/Oumlil approach, Sweeney states:

Williams and Oumlil presented a classification system in their article, not a taxonomy. They categorized articles in the JPMM but they did not address the underlying thought used to develop the system. (Sweeney, 1989, p. 17)

By definition, a taxonomy includes a classification system; it also includes the theoretical basis and method by which the system is developed. The fact that Williams and Oumlil did not present a taxonomy in their article does not diminish the value of their research.

It does, however, invite questions about the optimality of their classification system. For example, does the Williams/Oumlil approach:

- meet the objectives of a classification system?
- conform with the desired attributes of categories?
- possess the key attributes of a classification system?

These questions are at the heart of Sweeney's evaluation of the Williams/Oumlil approach as a suitable classification system for contracting literature (Sweeney, 1989, pp. 20-24). They are derived from classification theory Sweeney examined during the conduct of his research.

A detailed review of classification theory is beyond the scope of this thesis. However, an outline of the highlights of the theory referred to in Sweeney's thesis is appropriate for several reasons. First, it indicates the rigorous evaluation to which the Williams/Oumlil approach was subjected. Second, it identifies the requirements which must be met in modifying the Williams/Oumlil approach to conform with theory. Third, it suggests Sweeney's classification system conforms to the definition of a taxonomy.

The first question addresses the objectives of a classification system. There are four basic objectives of classification systems (Chrisman, 1988, p. 415):

- differentiation
- generalization
- identification
- information retrieval

The second question addresses the key attributes of a classification system's categories. For a classification system to achieve the four objectives, its categories must possess certain attributes (Chrisman, 1988, p. 416):

- mutual exclusivity
- internal homogeneity
- completeness
- stability
- basis in relevant language or names

The third and final question addresses the key attributes of a classification system. It is not sufficient that the categories possess certain attributes; the entire classification approach must also possess key attributes (Chrisman, 1988, p. 417):

- based on the key attributes of the entities being classified
- general rather than special purpose
- parsimonious
- hierarchical in nature
- timeless

Sweeney's thesis thoroughly describes his theoretical evaluation of the Williams/Oumlil approach. In his overall assessment of their approach, Sweeney states:

Analysis of the Williams/Oumlil classification system finds that it meets most of the criteria of the optimal classification scheme detailed earlier. Its categories are complete and labeled with relevant names. The system itself is based on key characteristics of the literature it classifies. It is general purpose, parsimonious, and timeless. The areas in which it is weak are that its categories are not mutually exclusive...this flaw resulted in the determination that the categories are not homogeneous or stable. Finally, the system is not hierarchical. (Sweeney, 1989, p. 24)

Despite apparent flaws, the Williams/Oumlil approach to classifying literature performs well, if not optimally, under theoretical scrutiny. Sweeney concludes:

Overall, the Williams/Oumlil system is a good system that can be even better with some minor adjustments. It is a useful system in terms of modifying it as a tool for classifying contracting literature. (Sweeney, 1989, p. 24)

3. Sweeney's Taxonomy

Sweeney's Taxonomy is a classification system for contracting literature. It is the result of modifying the Williams/Oumlil approach in an attempt to develop a theoretically optimal classification system. This description of Sweeney's Taxonomy will first discuss how the Williams/Oumlil approach was modified; a summary description of the taxonomy will then be presented.

Recall that the Williams/Oumlil approach was based on four category groups:

- TYPE OF ARTICLE
- NATURE OF ARTICLE
- SUBJECT MATTER
- DATE OF ARTICLE

The TYPE OF ARTICLE category group consisted of four categories: theoretical/conceptual, practical/managerial, case studies, and education/professionalism. Sweeney rejected the case studies category because:

...case history articles could also be categorized as either theoretical or practical. The elimination of this category would improve the contracting system's parsimony without jeopardizing its objective of completeness. (Sweeney, 1989, p. 25)

Three TYPE OF ARTICLE categories (theoretical/conceptual, practical/managerial, and education/professionalism) are retained in Sweeney's Taxonomy.

The NATURE OF ARTICLE category group was accepted by Sweeney without adjustment. Two NATURE OF ARTICLE categories (positive and normative) were retained in Sweeney's Taxonomy.

The SUBJECT MATTER and DATE OF ARTICLE categories were excluded from Sweeney's Taxonomy. With regard to the SUBJECT MATTER category, Sweeney states "that phase of effort is beyond the scope of this thesis and not an integral part of the classification scheme (Sweeney, 1989, p. 19)." His decision not to include this category is probably not related to the potential value of subject matter information. It is

probably due to the fact that a subject matter index already existed.

Williams and Oumlil use the DATE OF ARTICLE category to analyze the subject matter of the articles during specified time intervals. This category was not used in conjunction with the TYPE or NATURE categories. Sweeney most likely linked the deletion of this category with his decision to exclude the SUBJECT MATTER category from his taxonomy.

Sweeney's modifications thus far have not addressed the flaws in the Williams/Oumlil approach. It still does not "meet the objectives of being mutually exclusive, homogeneous, stable, and hierarchical (Sweeney, 1989, p. 25)." The following adjustments were made to correct these flaws.

Sweeney states that the problem of the Williams and Oumlil categories not being mutually exclusive is "based on the fact that an article could be both positive and normative." (Sweeney, 1989, p. 31) This is because "the nature of the literature being classified is such that it can, in some cases, be assigned to more than one category (Sweeney, 1989, p. 20)." Sweeney evaluated several alternatives to solve this dilemma of choice; his solution was to "rely upon the classifier's subjective assignment of articles based on his perception of the thrust of the article." (Sweeney, 1989, p. 31)

Sweeney's solution actually makes explicit an implicit requirement of the Williams and Oumlil classification system.

The value of Sweeney's effort to find a solution to this inherent problem is that alternatives were assessed and found lacking (Sweeney, 1989, p. 29-30).

The apparent failure of the Williams/Oumlil approach to be homogeneous and stable is attributable to the apparent lack of mutually exclusive categories in their system. By making explicit the requirement that the assignment of an article be on a mutually exclusive basis, the classification system should be internally homogeneous and stable. (Sweeney, 1989, p. 33)

Recall that there are two category groups retained from the Williams/Oumlil approach: TYPE OF ARTICLE and NATURE OF ARTICLE. Sweeney observes that "the Williams/Oumlil system is not hierarchical. It is flat. There is only one level (Sweeney, 1989, p. 23)." The NATURE OF ARTICLE group consists of two categories, normative and positive. To create a hierarchical classification system, Sweeney subdivides the normative and positive categories by basis for analysis.

The sub-category group BASIS FOR ANALYSIS seeks to determine if the articles are based on empirical or non-empirical evidence. Articles that are based on empirical evidence tend to be more convincing than non-empirical articles based on opinion (Sweeney, 1989, p. 27). The two BASIS FOR ANALYSIS categories are:

- empirical
- non-empirical

Although this adjustment would have satisfied the hierarchical requirement, Sweeney believed that valuable information could be provided by subdividing these categories by the type of logic employed by the author in reaching conclusions (Sweeney, 1989, p. 28). To this end, Sweeney subdivides the empirical and non-empirical categories by approach to reaching conclusions.

The sub-subcategory group APPROACH TO REACHING CONCLUSIONS contains three categories:

- inductive logic
- deductive logic
- no particular logic

Inductive articles reflect reasoning from the specific to the general. Deductive articles reflect reasoning from the general to the specific. Sweeney defines a "no particular logic" article as one in which "the author does not rely on an inductive or deductive line of reasoning to support or in arriving at his conclusions." (Sweeney, 1989, p. 29)

Given these modifications to the Williams/Oumlil approach, it is possible to offer a summary description of Sweeney's Taxonomy. Sweeney describes his taxonomy as follows:

...the contracting literature taxonomy contains three basic categories on its vertical axis:

theoretical/conceptual, managerial/practical, and professional/education. Each of these categories is subdivided on three levels. The elementary division according to the nature of the article is between positive and normative. Each of these divisions is subdivided into empirical and non-empirical as indicators of the authors' basis for analysis. Finally, each of those subdivisions is further subdivided into inductive, deductive, and no particular logic according to the authors' approaches to reaching conclusions. Effectively, an article can thus be assigned to one of thirty-six categories. (Sweeney, 1989, pp. 30-31)

C. EXPANSION OF SWEENEY'S TAXONOMY

1. Subject Matter Classification

Sweeney's Taxonomy meets the theoretical requirements of an optimal classification system. It conforms with the desired attributes of categories and the desired attributes of a classification system. The taxonomy also meets the objectives of a classification system.

The information provided by Sweeney's analysis of the classification results attests to the value of the taxonomy as a tool for gaining insight into the acquisition and contracting field. For example, his efforts revealed an emphasis on theoretical articles over practical or professional articles. This was considered a surprising result, since the publication is meant to be a practical aid (Sweeney, 1989, pp. 41-42).

This information could also have been gained by applying the Williams/Oumlil approach to the articles. Applying Sweeney's Taxonomy, however, yields valuable

information that would not have been provided by applying their classification system. For example, Sweeney was able to determine that over 50 percent of the theoretical articles displayed either inductive or deductive logic in support of the authors' conclusions. He was also able to determine that the authors' tended to reason inductively and that their use of empirical evidence was minimal. (Sweeney, 1989, pp. 43-44)

It can also be stated that the Williams/Oumlil approach could have yielded valuable information not provided by Sweeney's Taxonomy. For example, classification by subject matter common to the acquisition and contracting field could have identified subject matter which has been emphasized or neglected in the literature. The results may have shown that the pre-award phase has been emphasized and the post-award phase neglected.

It is clear that Sweeney's Taxonomy represents an improvement over the Williams/Oumlil approach. It is also clear that the taxonomy lacks one feature that yields valuable information in the Williams/Oumlil approach: classification by subject matter.

It is the intent of this researcher to expand Sweeney's Taxonomy to permit classification by subject matter. The SUBJECT MATTER category consists of 69 categories based on the National Contract Management Association Body of Knowledge modules, listed in Appendix A. This is in line with Sweeney's recommendation:

A further recommendation is development of a special classification system to evaluate some narrow areas of interest. While this effort would not be a part of the contracting literature taxonomy, it could almost be considered a subset of the taxonomy. Special categories would...expand upon the information the general taxonomy provides. Special areas conducive to special taxonomies include classification according to National Contract Management Association Body of Knowledge modules. (Sweeney, 1989, p. 54)

Expanding Sweeney's Taxonomy to include subject matter classification by Body of Knowledge modules should be a productive, efficient, and uniform improvement. It should be a productive improvement because of the expected value of the information provided. This aspect is supported by the Williams and Oumlil study.

It should also be an efficient improvement, if similar research efforts are conducted to classify other sources of contracting literature. Researchers will not have to develop subject matter categories, since they are already developed in the Body of Knowledge modules.

If future research efforts classify other sources of contracting literature by body of Knowledge modules, the results can be easily combined. The development of a comprehensive and uniform subject matter database could yield valuable information about the field.

2. Body Of Knowledge Modules

This subsection will describe the organization of the Body of Knowledge modules that form the basis for classifying contracting literature by subject matter. The source of the

modules is the *National Contract Management Journal Cumulative Subject, Author, and Title Index*, a publication of the National Contract Management Association.

The National Contract Management Association has developed a comprehensive breakdown of the body of thought related to the acquisition and contracting field. The result of this effort is commonly referred to as the Body of Knowledge; it is reproduced as Appendix A. A brief description of the organization of the Body of Knowledge is presented in the following paragraphs.

The Body of Knowledge encompasses various disciplines, topics, processes, and considerations traditionally associated with the acquisition and contracting field. The basic division of the Body of Knowledge results in three groups:

- BASIC TOOLS AND FUNCTIONS
- CONTRACTS AND PROCUREMENT
- SPECIAL TOPICS AND CONSIDERATIONS

Each of these groups are then divided and sub-divided to reflect lower levels of differentiation. This description will illustrate the breakdown of the CONTRACTS AND PROCUREMENT group along one branch to its lowest level, the module.

Within the CONTRACTS AND PROCUREMENT group are three categories: Management, Pre-Award, and Post-Award. These categories represent the core of the acquisition and

contracting field. The knowledge represented herein is generally not found within the boundaries of other fields.

The Pre-Award category is further divided into 11 sub-categories. These categories represent the lowest level of division within the Body of Knowledge: the module. Examples of modules within the Pre-Award category are Acquisition Planning, Requirements Determination, Negotiating Strategies, and Cost and Price Analysis. Modules within this category reflect knowledge which is considered fundamental to the pre-award function of acquisition and contract management.

The Body of Knowledge could be divided into lower levels of classification. For example, the module Negotiating Strategies could be sub-divided into Sole Source Negotiating Strategies and Competitive Negotiating Strategies. Further divisions, however, tend to result in diminished utility. This is because most articles are too general for assignment to a category more specific than a module.

3. An Expanded Sweeney's Taxonomy

The expansion of Sweeney's Taxonomy to include subject matter classification requires only one simple adjustment: a prompt for the researcher to assign an article under review to a Body of Knowledge module. The expanded taxonomy should yield information of greater value than either the Williams/Oumlil approach or Sweeney's Taxonomy. Figure 2-1 is an illustration of the expanded taxonomy.

D. SUMMARY

This chapter discussed the development and expansion of Sweeney's Taxonomy for contracting literature. The Williams/Oumlil approach to classifying literature was described first. This was followed by a summary of the theory used by Sweeney to evaluate and modify their approach. The resulting system, Sweeney's Taxonomy, was then described in detail.

A discussion in support of expanding Sweeney's Taxonomy to permit subject matter classification was also presented. It was followed by a description of the organization of the Body of Knowledge modules. The chapter concluded with a presentation of the expanded taxonomy.

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	Total
Theoretical/Conceptual													
Practical/Managerial													
Professional/Education													
Total													

NCMA Body of Knowledge Module:



I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 2-1: Sweeney's Taxonomy (expanded)

III. SUMMARY ANALYSIS

A. INTRODUCTION

There were 413 articles published in the *National Contract Management Journal* from 1966 through 1989. Sweeney's Taxonomy, expanded to permit subject matter classification, was applied to each article. Analysis of the results of applying the expanded taxonomy will provide information about patterns and trends in the literature. This information will be used to draw conclusions about the acquisition and contracting field.

This analysis will be conducted in two phases. Each phase will be presented in a separate chapter. The first phase, presented in this chapter, is a summary analysis of the number of articles ultimately assigned to the various categories and modules. This chapter also discusses the application of the expanded taxonomy and problems encountered in its application.

The second phase, presented in chapter IV, is a time-series analysis which looks at the classification results in four six-year intervals.

B. APPLICATION OF THE EXPANDED TAXONOMY

Applying the expanded taxonomy is a simple, two-step process. First, the researcher assigned an article to one of the categories in Sweeney's classification matrix. Second, the

researcher assigned an article to one of the National Contract Management Association Body of Knowledge modules.

Sweeney suggests that as each article is reviewed, the following questions should be kept in mind (Sweeney, 1989, p. 37):

- Is the article empirical? Is it based on some kind of random sample, extensive observation, or substantial use of statistical theory?
- Is the article descriptive (positive)? Does it explain or describe how some existing process works? Or is it prescriptive (normative)? Does it propose the way a process should work, how the design of some system/process should be changed to make it better?
- Does the author reason from specific cases to a statement or assertion about an entire group or class of things (inductive logic)? Or does the author describe how an entire class of things works and deduce from that this particular item should thus operate in a similar manner (deductive logic)? Or does the author apply any type of logic at all? The article may be completely descriptive.
- Is the article about an intangible, conceptual, more abstract theory (theoretical)? Or is it more immediately useful, practical, and important to the routine functions of the manager (practical)?
- Does the article concern neither practical or theoretical concepts, but rather professional areas such as certification, advancement, or educational issues (professional/education)?

Since the taxonomy was expanded to include subject matter classification, other questions must be addressed to complete the classification process:

- What is the subject matter thrust of the article?
- Which of the 69 National Contract Management Association Body of Knowledge modules best represents the thrust of the article?

Applying the taxonomy results in the assignment of an article to one of 36 categories in the taxonomy matrix and one of 69 subject matter modules. The expanded taxonomy could therefore be described as possessing 2,484 categories.

The researcher applied the expanded taxonomy to 346 articles comprising the *National Contract Management Journal* Volume 1, Number 1 (1966) through Volume 17, Issue 2 (1983); and Volume 23, Issues 1 and 2 (1989).

Next, articles reviewed by Sweeney were assigned to Body of Knowledge modules consistent with their classification in the *National Contract Management Journal Cumulative Subject, Author, and Title Index*. Volume 22 articles classified by Sweeney were not included in the index; however, they were reviewed for subject matter content and assigned modules.

These results were merged with the results of Sweeney's classification of 67 articles in Volume 18, Issue 1 (1984) through Volume 22, Issue 2 (1988). A total of 413 articles were classified.

C. PROBLEMS ENCOUNTERED

Two problems were encountered in the application of the expanded taxonomy to the literature. The first problem was the

degree of subjectivity necessary to classify the literature. The second problem was the difficulty encountered in assigning an article to a Body of Knowledge module.

1. Subjectivity

Classification of the literature was a subjective process. This problem was also encountered by Sweeney during the conduct of his research:

In light of the difficulties sometimes encountered by the researcher in the actual classification, it was necessary to carefully consider the questions...in reviewing most articles. Numerous reviews of the definitions of each category were also necessary when applying the classification scheme to the articles. Due to the subjectivity involved in classifying contracting literature, it is unreasonable to assume that two people will assign a given article to the same category. (Sweeney, 1989, p. 40)

Each of the four main categories (TYPE OF ARTICLE, NATURE OF ARTICLE, BASIS FOR ANALYSIS, and APPROACH TO REACHING CONCLUSIONS) of Sweeney's Taxonomy possess some degree of subjectivity. This problem was most often encountered when classifying by TYPE OF ARTICLE. Recall that this category is subdivided into three subcategories: theoretical/conceptual, practical/managerial, and professional/education.

The distinction between theoretical and practical was the most difficult. For example, Ralph C. Nash's article "Weapon System's Acquisition in the 1970's -- New Policy and Strategy," details several premises upon which to base acquisition policy. It also describes a strategy embodying

these premises. The researcher classified the article as theoretical, since it describes a concept that might impact the procurement field. From the researcher's middle management/student perspective, this article is not predominantly practical or useful as a management tool. If this article were viewed from the perspective of a policy-level acquisition manager, a different classification might result.

Subjectivity is an inherent problem in the classification of contracting literature. Future consideration of the results of this research effort should take into account the perspective of the researcher.

2. Module Assignment

The problem of subjectivity was also encountered in the assignment of articles to Body of Knowledge modules. Many articles were broad in scope and could easily have been assigned to two or more modules. The eventual assignment of this type of article was based on the researcher's perception of the predominant thrust of the article.

A problem far more perplexing was the absence of a module which adequately describes this thrust. This problem was most often encountered when the article addressed legal issues.

Appendix A depicts the organization of the modules. Modules 17-22 are grouped under the heading of Commercial Law.

These modules are too specific to accommodate many of the articles which focused on Contract Law. For example, Norman R. Thorpe and Robert L. Schaefer's article "Debarment, Suspension, and Present Responsibility" had to be assigned to Module 24, The Procurement Process, for lack of a more appropriate contract law module.

Similarly, articles which addressed professionalism and procurement research had to be assigned to other modules. The modules selected most often were Module 23, Procurement Organization and Management, and Module 24, The Procurement Process.

D. SUMMARY ANALYSIS ✓

This summary analysis will be presented in three subsections. The first subsection will examine the taxonomical classification results generated by the categories in Sweeney's taxonomy. The second subsection will evaluate the results generated by classifying the subject matter of each article within the Body of Knowledge modules. The final subsection will analyze the unique, hybrid results generated by the expanded taxonomy.

1. Taxonomical Results

Figure 3-1 is a summary of the results of applying Sweeney's Taxonomy to the literature. The articles were classified by TYPE OF ARTICLE: (theoretical, practical, or professional); NATURE OF ARTICLE (normative or positive);

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	Total
Theoretical/Conceptual	19	6		49	34	4	22			52	12	42	240
Practical/Managerial	4	3		22	15	9	2			16	2	90	163
Professional/Education				2	2	1	4					1	10
Total	23	9		73	51	14	28			68	14	133	413

Normative = 170 Positive = 243

Empirical = 60 Non-Empirical = 353

Inductive = 192 Deductive = 74 No Particular Logic = 147

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-1: Summary of Article Classification

BASIS FOR ANALYSIS (empirical or non-empirical); and APPROACH TO REACHING CONCLUSIONS (inductive, deductive, no particular logic).

Analysis of the four main categories in Sweeney's Taxonomy yields valuable information about the focus of acquisition and contracting literature. Figure 3-2 is a breakdown of the TYPE OF ARTICLE category: 240 (58%) articles are theoretical, 163 (40%) are practical, and ten (2%) are professional.

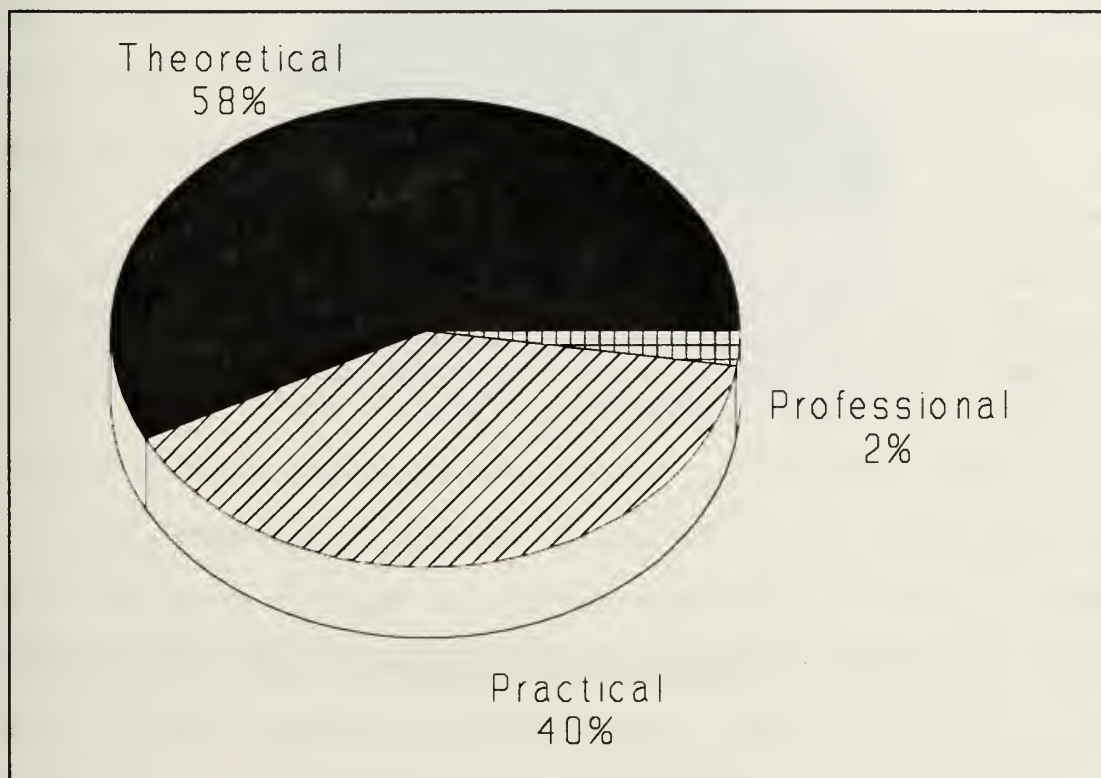


Figure 3-2: TYPE OF ARTICLE Category

It is particularly clear that theoretical articles are emphasized in the *National Contract Management Journal*. This

is an expected result, given the scholarly nature of the publication.

Based on their biographies, this researcher considers most of the authors upper level or senior mid-level managers, academics, and/or professionals. Many of the authors have advanced beyond the hands-on, practical aspects of acquisition and contract management. Instead, they are involved with the more abstract and theoretical aspects of the field. For these authors, the *National Contract Management Journal* represents a forum for the communication of ideas, opinions, and observations which could have a profound effect on the field.

The low number of professional/education articles was a surprise to the researcher. As noted by Sweeney,

The *National Contract Management Journal* is not generally a forum for pieces on certification, educational opportunities, or advancement in contracting. These issues are most often found in publications such as *Contract Management* magazine. (Sweeney, 1989, p. 40)

These are not the issues one would necessarily expect to be addressed in the *National Contract Management Journal*. However, given the apparent seniority of this publication's authors, one would expect more articles about the state of the workforce and its quest for professional status. The lack of professional articles indicates the discipline is heavily process-oriented.

A summary of this analysis of the TYPE OF ARTICLE category indicates: (1) theoretical articles are emphasized in

the literature, and (2) the number of professional articles is surprisingly low.

Figure 3-3 depicts the breakdown of the NATURE OF ARTICLE category: 170 (41%) articles are normative, or prescriptive, and 243 (59%) are positive, or descriptive. One explanation for the emphasis towards positive articles may lie in the complexity of the acquisition and contracting field.

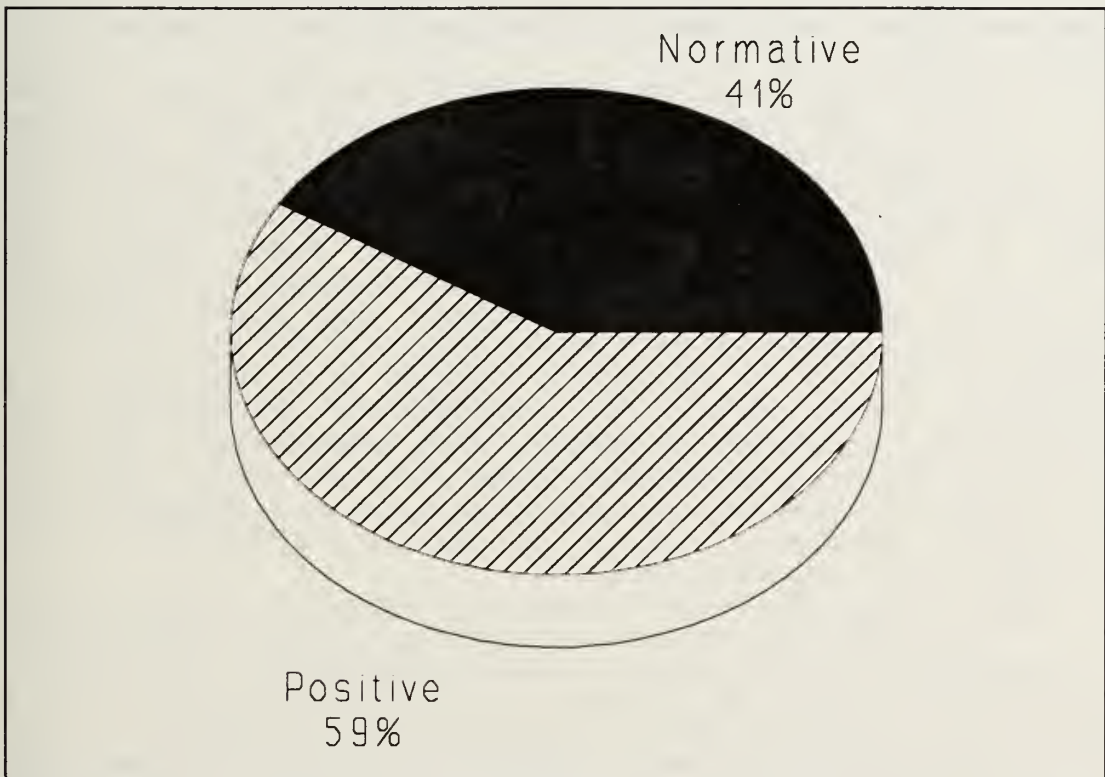


Figure 3-3: NATURE OF ARTICLE Category

Many aspects of the field are defined by a complicated assortment of statutes, regulations, and judicial decisions. Practitioners in the field must have a working knowledge of many of the subject areas identified in the Body of Knowledge.

The *National Contract Management Journal* is an important conduit for describing this complex environment in ways useful to the practitioner.

Sweeney suggests another explanation for the predominance of positive articles:

...descriptive articles do not require development and presentation of valid solutions or recommendations for corrective measures. The prescriptive article is a bit more difficult to construct...it requires formulation of a defensible recommendation for improvement. (Sweeney, 1989, p. 43)

Within the theoretical category, 112 (47%) articles were classified as normative and 128 (53%) as positive. The number of positive articles may seem high, given the predominance of theoretical articles. One might expect a theoretical article to recommend changes as a follow-on to a description of a concept or theory. This researcher classified many articles as theoretical-positive because recommendations for change were not well-defined.

For example, Derald A. Stuart's article "Government-Industry Contracting: What Should the Relationship Be?" offers a theory which suggests why a sense of mistrust has developed between the Government and Industry. He suggests that what is needed is a procurement environment characterized by mutual trust, respect, and dependency. Although this suggestion might alter the status quo, it is too vague and general. Subsequently, this article was classified as theoretical-positive.

Within the practical category, 53 (33%) articles were classified as normative and 110 (67%) as positive. Practical-normative articles generally suggest changes that could be implemented at lower levels than theoretical-normative articles. This result indicates most articles written for practical use are not improvement-oriented; instead, they describe existing processes, regulations, etcetera.

Within the professional category, articles were equally split between normative and positive. Most of the normative articles discussed professionalization of the acquisition and contracting workforce. The positive articles generally were reports of surveys.

Of the 170 articles classified as normative, 112 (66%) were considered theoretical, 53 (31%) were considered practical, and five (3%) were considered professional. Most authors advocating change do so at conceptual levels far removed from the hands-on manager. This indicates change may be difficult to implement at the lower levels of management. Given the degree to which acquisition and contracting managers are directed by statute and regulation, one might argue that change must necessarily originate at the highest levels of management.

A summary of this discussion of the NATURE OF ARTICLE category indicates: (1) a majority of the articles are descriptive rather than prescriptive, and (2) when an article

is prescriptive, it usually recommends changes at the policy level.

Before discussing the BASIS FOR ANALYSIS category, a comparison of the results of the Williams and Oumlil study and the results of this study is considered appropriate. Recall that the Williams/Oumlil approach also classified articles by TYPE OF ARTICLE and NATURE OF ARTICLE.

The results of the Williams and Oumlil study indicates a similar breakdown by TYPE OF ARTICLE. Although their approach contained a category (Case Histories) not included by Sweeney (Sweeney, 1989, p. 25), this category accounted for less than 10 percent of the articles. Of the 472 articles reviewed in their study, approximately 48 percent were theoretical, 34 percent were practical, and ten percent were professional (Williams, 1987, p. 25).

Both studies indicate a predominance of theoretical articles over practical articles. The notable difference is the five-fold increase in the percent of articles classified as professional articles in the Williams and Oumlil study. This indicates the literature dedicated to the purchasing and materials management field may be less process-oriented and more workforce-oriented.

The Williams and Oumlil study classified approximately 65 percent of the articles as normative and 35 percent as positive. This contrasts sharply with the 41 percent to 59 percent split among normative and positive articles in this

study. Williams and Oumlil offer an explanation for the predominance of normative articles:

The large number of articles in this section is probably indicative of the degree of maturity of the discipline. As the purchasing and materials management areas continue to develop in various dimensions, more articles likely will appear in the positive category. (Williams, 1987, p. 26)

Applying this explanation to the acquisition and contracting field suggests that it is: (1) a relatively mature discipline, and (2) a discipline that continues to develop in various dimensions. Acquisition and contracting is a relatively mature discipline in the sense that its basic tools, functions, and processes have been developed and successfully applied. It is also a dynamic discipline that continues to develop in response to various statutory, regulatory, judicial, and economic influences.

In summary, a comparison of the results of the Williams and Oumlil study and the results of this study indicates: (1) the *Journal of Purchasing and Materials Management* has emphasized prescriptive articles, whereas the *National Contract Management Journal* has emphasized descriptive articles, and (2) articles in both publications were predominantly theoretical.

Figure 3-4 depicts the breakdown of the BASIS FOR ANALYSIS category: 60 (15%) articles are empirical, and 353 (85%) are non-empirical. The predominance of non-empirical articles indicates the majority of authors do not support their positions or recommendations with empirical evidence.

Instead, they generally rely on the force of their opinion, judgement, and experience for support.

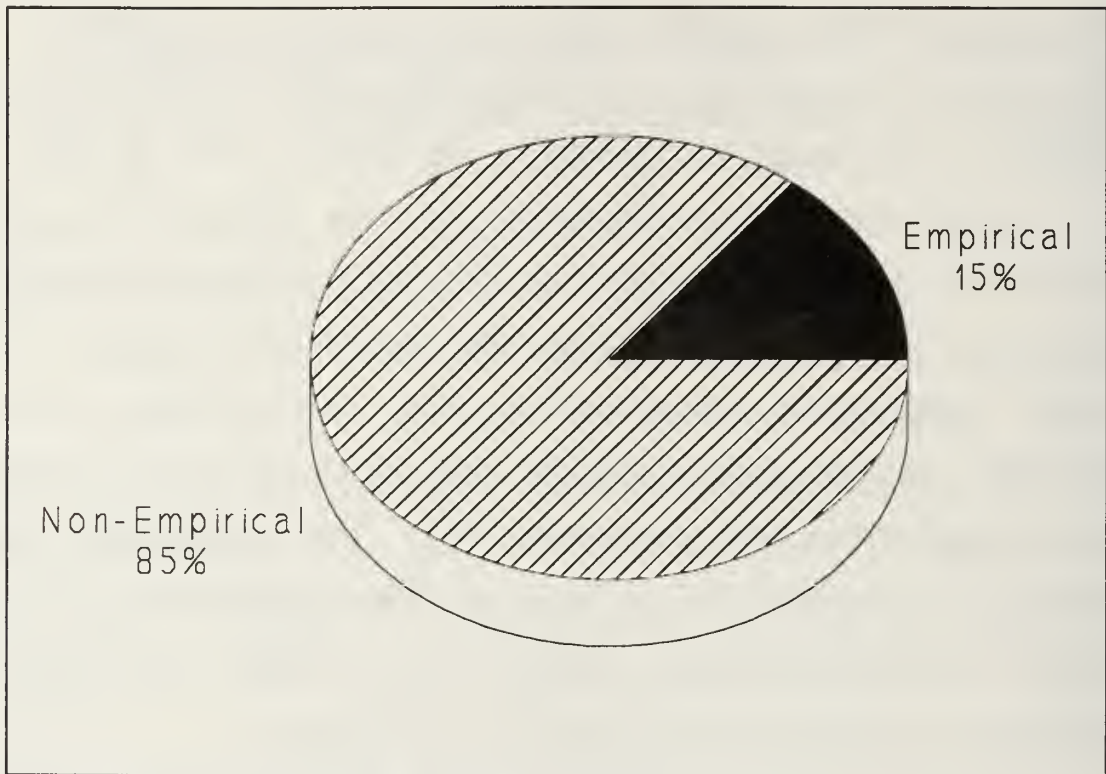


Figure 3-4: BASIS FOR ANALYSIS Category

Empirical support is important because it enhances the credibility of the author's position. Sweeney observes that:

Articles based on empirical evidence are more convincing and better documented. Articles based on non-empirical evidence are generally more subjective and often based on personal opinion. (Sweeney, 1989, p. 28)

Jack C. Kline and James M. Fremgen's article "The Impact of Cost Accounting Standard (CAS) 409 on the Defense Industry" illustrates the value of empirical evidence. CAS 409 was opposed by most defense contractors because they believed

it would result in reduced cash flow. In their conclusion, the authors contend the financial problems predicted did not materialize. Their survey of controllers of 200 defense contractors (50 respondents), designed to determine the impact of CAS 409, was empirical evidence that enhanced the credibility of their conclusion.

Empirical evidence is less important in positive articles, since the author is not recommending changes in the status quo. Nevertheless, it supports the author's description of a particular process, concept, or other similar measure.

Of the 60 articles classified as empirical, 32 (53%) articles were normative and 28 (47%) were positive. The 32 normative-empirical articles represent 19 percent of all normative articles, whereas the 28 positive-empirical articles represent only 12 percent of all positive articles. This result indicates empirical evidence is used more often in prescriptive articles.

The breakdown of empirical articles by TYPE OF ARTICLE indicates most empirical articles were also classified as theoretical articles. Of the 60 empirical articles, 47 (78%) were theoretical, nine (15%) were practical, and four (7%) were professional. The 47 theoretical-empirical articles represent 20 percent of all theoretical articles, the nine practical-empirical articles represent five percent of all practical articles, and the four professional-empirical articles represent 40 percent of all professional articles.

This result indicates an author will most likely use empirical evidence in support of professional articles. However, it is important to note professional articles represent only two percent of the literature. Furthermore, all of the articles classified as professional-empirical were positive articles, and two of the four were reports of reader surveys.

A summary of this discussion of the BASIS FOR ANALYSIS indicates: (1) empirical evidence was used sparingly in the literature, and (2) when empirical evidence was used, it was used almost exclusively to support theoretical presentations.

Figure 3-5 depicts the breakdown of the APPROACH TO REACHING CONCLUSIONS category: 192 (46%) articles are inductive, 74 (18%) are deductive, and 147 (36%) exhibit no particular logic. Combining the deductive and inductive categories means a logical approach was used 64 percent of the time. When a logical approach was used, it was usually inductive. The authors would "argue points from details of specific cases and then make general statements about a larger issue." (Sweeney, 1989, p. 44)

The number of articles classified as demonstrating no particular logic at first seems high. The first consideration in evaluating an article for its approach to reaching conclusions was whether or not there were any conclusions. Many articles were purely descriptive and stated no conclusions. This type of article generally does not require

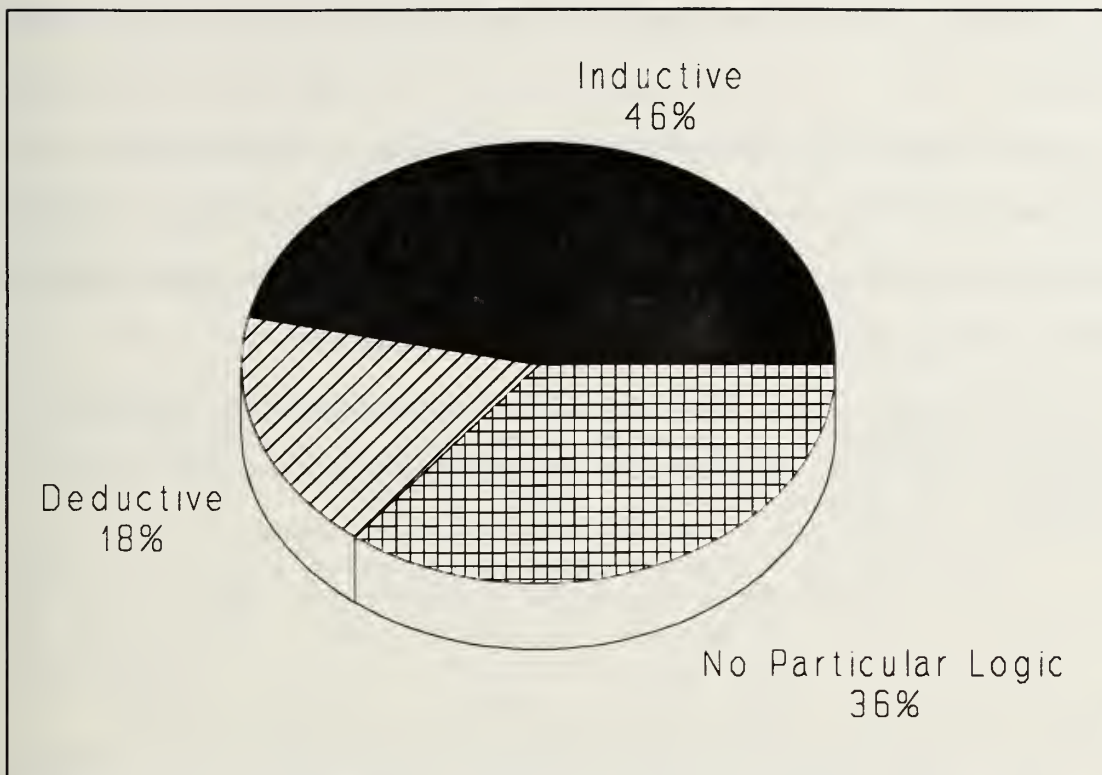


Figure 3-5: APPROACH TO REACHING CONCLUSIONS Category

logical support and are classified as demonstrating no particular logic. This explains why the theoretical- and practical-positive-non-empirical-no particular logic categories contained 132 of 243 (54%) articles classified as positive.

There were 110 (46%) positive articles that did present some form of logical approach to reaching conclusions. Of these, 86 (78%) articles were theoretical, 20 (18%) articles were practical, and four (4%) were professional. This result indicates that when a logical approach is used in a

descriptive article, the article is most likely a theoretical article.

In contrast to expectations that a large number of positive articles would demonstrate no particular logic, normative articles were expected to show a logical approach in reaching conclusions. Sweeney observed that:

On the other hand, normative or prescriptive articles would be expected to provide some sort of statistical or logical argument to support the recommendations of a new process or system (Sweeney, 1989, p. 45).

The results indicate this expectation was valid. Only 14 (8%) of 170 normative articles were classified as demonstrating no particular logic in their approach to reaching conclusions. This result indicates an author recommending change most often argues his case with some sort of logical approach. This is particularly important, given the minimal use of empirical evidence.

Another expected result was that few, if any, of the articles classified as demonstrating no particular logic would be empirical articles. The presentation of empirical evidence indicates some form of logical approach.

A summary of this discussion of the APPROACH TO REACHING CONCLUSIONS category indicates: (1) most articles displayed a logical approach in reaching conclusions, (2) when a logical approach was used, it was inductive, (3) logic was most often used in support of theoretical articles, and (4) no

particular logic was most often found in practical, descriptive articles.

Since one of the primary objectives of this research effort is to ascertain focal points in the literature, this analysis has concentrated primarily on the taxonomical categories that had articles assigned. Analysis of the unused categories indicates there are several literary approaches that have not been used in articles published in the *National Contract Management Journal*. The following discussion suggests several of these approaches could be used effectively in the literature.

As previously discussed, it was not surprising there were no articles assigned to either the normative- or positive-empirical-no particular logic categories. However, it was surprising that there were no professional-normative-empirical articles. Even though six of the ten professional articles were prescriptive in nature, empirical evidence was not used in support of the authors' recommendations. ✓

For example, Conroy B. Johnson's article "For the Betterment of Procurement" presents a good argument that there is sufficient similarity between Federal, State, local Government and commercial procurement practices, to merit a uniform basic procurement education curriculum and a broad-based professional recognition program. Empirical evidence, such as survey data from a representative sample of Government and commercial entities, could have been used to precisely

describe how the various entities are similar. This information would have strengthened his argument. Given the potential influence of professional, normative articles on the acquisition community and its quest for professional status, empirical evidence should be used to the maximum extent possible in this type of article.

An interesting result was that no articles were classified as positive-empirical-deductive. All of the positive articles supported with empirical evidence demonstrated an inductive approach.

An empirical, deductive approach could be effective in describing various aspects of the acquisition and contracting field. For example, this approach could be used to describe the rationale behind Government programs, such as the Federal Government's 8(a) program. An author could present demographic data that indicates minorities are economically disadvantaged, and empirical evidence that demonstrates Government intervention can help reduce this disadvantage. Next, the author could discuss how Federal, State, and local Government programs have been developed to promote the economic development of minorities. The author could then describe the Federal 8(a) program.

This example illustrated a positive-empirical-deductive approach could be used effectively in contracting literature. It also demonstrated the relative ease with which empirical evidence can be used to enhance a descriptive

article. Given the preponderance of non-empirical descriptive articles, one way to improve the overall quality of the *National Contract Management Journal* would be to publish more empirical descriptive articles.

2. Subject Matter Results

This subsection examines the subject matter content of the articles. Analysis of the number of articles assigned to the various Body of Knowledge modules should indicate what subject matter has been emphasized in the *National Contract Management Journal*.

Chapter I described the organization of the Body of Knowledge on three levels. The most general level divided the Body of Knowledge into three general groups. The second level divided it into nine areas that were more specific. The third level divided it into 69 specific subject modules.

This analysis will be conducted consistent with the organization of the Body of Knowledge. The results will be analyzed at the general level of classification first, and the most specific level last.

Table 3-1 indicates the modules are divided into three groups: BASIC TOOLS AND FUNCTIONS, CONTRACTS AND PROCUREMENT, AND SPECIAL TOPICS AND CONSIDERATIONS. Analysis of these groups will indicate which have been emphasized in the literature.

TABLE 3-1: NUMBER OF ARTICLES ASSIGNED TO MODULES

I. BASIC TOOLS & FUNCTIONS

ECONOMICS

<u>Module</u>	<u>Description</u>	<u>Articles Assigned</u>
1	Macroeconomic Concepts	1
2	Microeconomic Concepts	0
3	Industrial Organization	1
4	Labor Economics	0

ACCOUNTING AND FINANCE

5	Cost Accounting Basics	5
6	Cost Accounting Standards	16
7	Elements of Business Finance	21
8	Financial Reports	0
9	Break-Even Analysis	0
10	Make or Buy Analysis	0

MATERIALS AND OPERATIONS

11	Elements of Production	4
12	Elements of Industrial Marketing	0
13	Elements of Logistics	1
14	Elements of Inventory Management	0
15	Surplus and Excess Property	0
16	Materials Management	1

COMMERCIAL LAW (UCC)

17	Elements of a Contract	3
18	Terms and Conditions	0
19	Agency	0
20	Warranties	2
21	Unconscionability	2
22	Breaches and Remedies	13

Total	70
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TABLE 3-1 (cont.): NUMBER OF ARTICLES ASSIGNED TO MODULES

II. CONTRACTS AND PROCUREMENT

MANAGEMENT

<u>Module</u>	<u>Description</u>	<u>Articles Assigned</u>
23	Procurement Organization & Management	31
24	The Procurement Process	29
25	Statutory & Regulation Foundation	13
26	The Contracting Officer	3

PRE-AWARD

27	Acquisition Planning	4
29	Requirements Determination	0
30	Solicitations, Bids, Awards	9
33	Contract Types	25
34	Source Selection	7
37	General Contract Provisions	8
38	Source Development	1
41	Standards & Specifications	3
42	Negotiating Strategies	6
45	Patents & Data Rights	8
46	Cost & Price Analysis	31

POST-AWARD

28	Contract Administration	4
31	Financial Management of Contracts	3
32	Changes	4
35	Quality Assurance	3
36	Terminations	6
39	Inspection, Acceptance & Warranties	5
40	Claims, Disputes, & Appeals	24
43	Monitoring Contract Performance	10
44	Contract Closeout	0
47	Contract Auditing	12
48	Acquisition Management Information Systems	4

Total	253
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TABLE 3-1 (cont.): NUMBER OF ARTICLES ASSIGNED TO MODULES

III. SPECIAL TOPICS AND CONSIDERATIONS

SPECIAL TOPICS

<u>Module</u>	<u>Description</u>	<u>Articles Assigned</u>
49	Budgeting for Procurement	1
50	Systems Acquisitions	14
51	Program/Project Management	5
52	Productivity	2
53	Automated Procurement	2
54	Ethics, Conflict of Interest	8
55	Value Analysis	1
56	Safety, Reliability & Maintainability	0
57	Socioeconomic Objectives	14
58	Small & Minority Business Business Development	7
59	Vendor's Management System Audit	0
60	Subcontracting & Subcontract Management	8
61	Commercial & industrial Products	0
62	Small Purchases	0
63	International Purchasing	12
64	Government Property	5

SPECIAL CONSIDERATIONS

65	Considerations in Architect & Engineer Contracting	1
66	Considerations in Construction Contracting	1
67	Considerations in Services Contracting	4
68	Considerations in R & D R & D Contracting	4
69	Considerations in ADP Contracting	1
Total		90

Figure 3-6 depicts the assignment of articles to the three module groups. There were 70 (17%) articles assigned to the TOOLS AND FUNCTIONS group; 253 (61%) articles assigned to the CONTRACTS AND PROCUREMENT group; and 90 (22%) articles assigned to the SPECIAL TOPICS group.

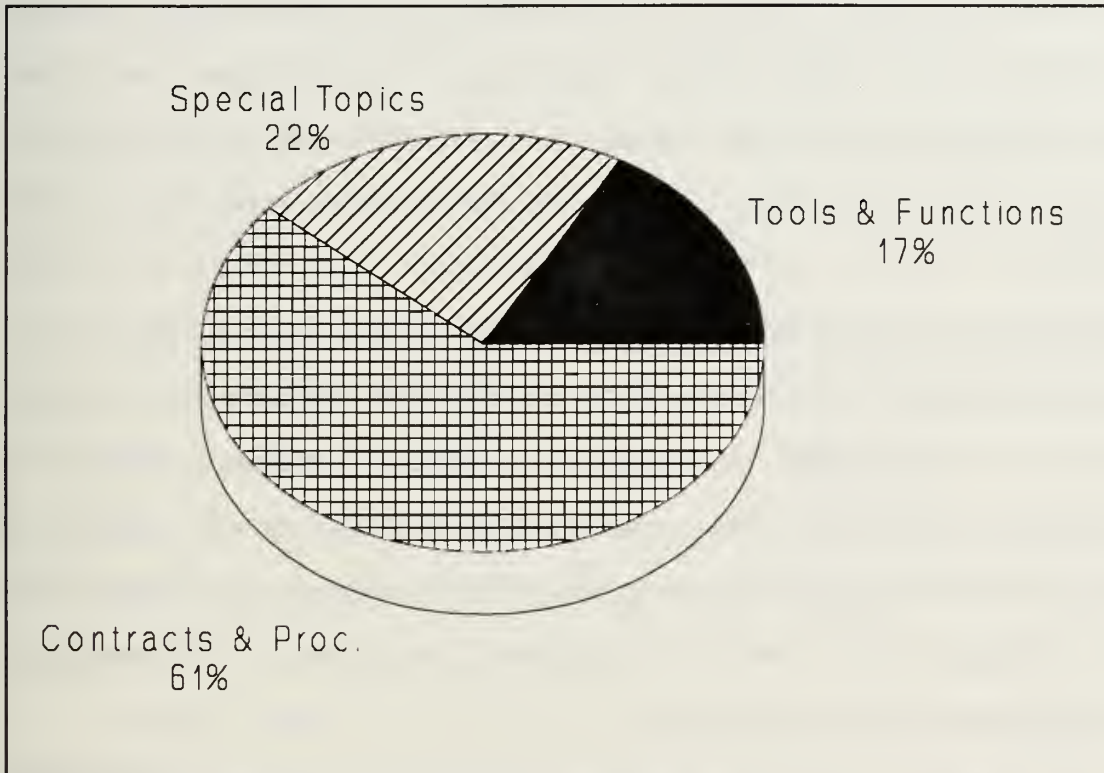


Figure 3-6: Module Category Groups

The predominance of the CONTRACTS AND PROCUREMENT group indicates the *National Contract Management Journal* has focused on topics traditionally considered the core of the Body of Knowledge. This subject matter identifies the acquisition field as a unique discipline. The share of articles dedicated to the BASIC TOOLS AND FUNCTIONS (17%) and

SPECIAL TOPICS AND CONSIDERATIONS (22%) indicates the *National Contract Management Journal* may be comprehensive in its coverage of the Body of Knowledge. Analysis at lower levels of classification will determine if this is the case.

Analysis of each group provides more information about the focus of the literature. Analysis of the 70 articles in the BASIC TOOLS AND FUNCTIONS group indicates there were two (3%) articles on economic subjects, 42 (60%) on accounting and finance subjects, six (8%) on materials and operations subjects, and 20 (29%) on commercial law subjects. This information indicates there is a substantial interface between the acquisition and contracting discipline and the accounting, finance, and legal disciplines. The interface with the economics, materials, and operations disciplines is much less pronounced. This suggests practitioners in the acquisition and contracting field should strive to develop accounting, finance, and legal skills.

Analysis of the 253 articles in the CONTRACTS AND PROCUREMENT group indicates there were 76 (30%) articles on management subjects, 102 (40%) on pre-award subjects, and 75 (30%) on post-award subjects. None of these groups can be described as dominant. The greater number of pre-award versus post-award articles, however, supports the opinions of many practitioners who believe the pre-award phase receives a disproportionate share of attention.

Analysis of the 90 articles in the SPECIAL TOPICS AND CONSIDERATIONS group indicates there were 79 (88%) articles on special topics and only 11 (12%) on special considerations. The predominance of special topic articles indicates subjects in the special considerations group are too specialized to generate much demand for articles on these subjects. On the other hand, subjects in the special categories group are more likely to be encountered by the acquisition and contracting workforce. Subsequently, more articles have addressed these subjects.

Table 3-1 lists the number of articles assigned to each of the modules. These results clearly indicate the degree to which specific subjects have been emphasized in the literature. For purposes of further analysis, this researcher will define a subject as having been emphasized in the literature if it was the subject of ten or more articles.

There were 14 modules with ten or more articles assigned. Three (21%) of these modules are in the BASIC TOOLS AND FUNCTIONS group. They contained 50 of 70 (71%) articles assigned to the group. The modules are (with number of articles assigned to each module in parentheses):

- Module 6: Cost Accounting Standards (16)
- Module 7: Elements of Business Finance (21)
- Module 22: Breaches and Remedies (13)

Eight (58%) of the modules with ten or more articles are in the CONTRACTS AND PROCUREMENT group: they contained 175 of 253 (69%) articles assigned to the group. The modules are:

- Module 23: Procurement Organization and Management (31)
- Module 24: The Procurement Process (29)
- Module 25: Statutory and Regulatory Foundation (13)
- Module 33: Contract Types (25)
- Module 40: Claims, Disputes, and Appeals (24)
- Module 43: Monitoring Contract Performance (10)
- Module 46: Cost and Price Analysis (31)
- Module 47: Contract Auditing (12)

Three (21%) of the modules with ten or more articles assigned are in the SPECIAL TOPICS AND CONSIDERATIONS group: they contained 40 of 96 (42%) articles assigned to the group. The modules are:

- Module 50: Systems Acquisitions (14)
- Module 57: Socioeconomic Objectives (14)
- Module 63: International Purchasing (12)

This analysis indicates 14 percent of the modules in the BASIC TOOLS AND FUNCTIONS group contain 71 percent of the articles assigned to this group; 31 percent of the modules in the CONTRACTS AND PROCUREMENT group contain 69 percent of the articles assigned to this group; and 14 percent of the modules

in the SPECIAL TOPICS AND CONSIDERATIONS group contain 42 percent of the articles assigned to this group.

Cumulatively, 64 percent of the articles were assigned to only 20 percent of the modules. This analysis leads to the conclusion that most of the literature published in the *National Contract Management Journal* is dedicated to a small part of the Body of Knowledge.

This analysis also leads to the conclusion these modules represent the topics which have been discussed most often in the *National Contract Management Journal* since it began publishing in 1966. One can also induce that these subjects represent the focus of contracting literature.

This researcher also conducted an interval analysis on the results in Table 3-1. The results of this analysis indicate 42 (61%) modules had 0-4 articles assigned; 13 (19%) modules had 5-9 articles assigned; seven (10%) modules had 10-14 articles assigned; one (1%) module had 15-19 articles assigned; and six (9%) had 20 or more articles assigned.

This analysis also indicates 61 (15%) articles were assigned to modules with 0-4 articles assigned; 87 (21%) articles were assigned to modules with 5-9 articles assigned; 88 (21%) articles were assigned to modules with 10-14 articles assigned; 16 (4%) articles were assigned to modules with 15-19 modules assigned, and 161 (39%) articles were assigned to modules with more than 20 articles assigned. Figure 3-7 depicts this analysis.

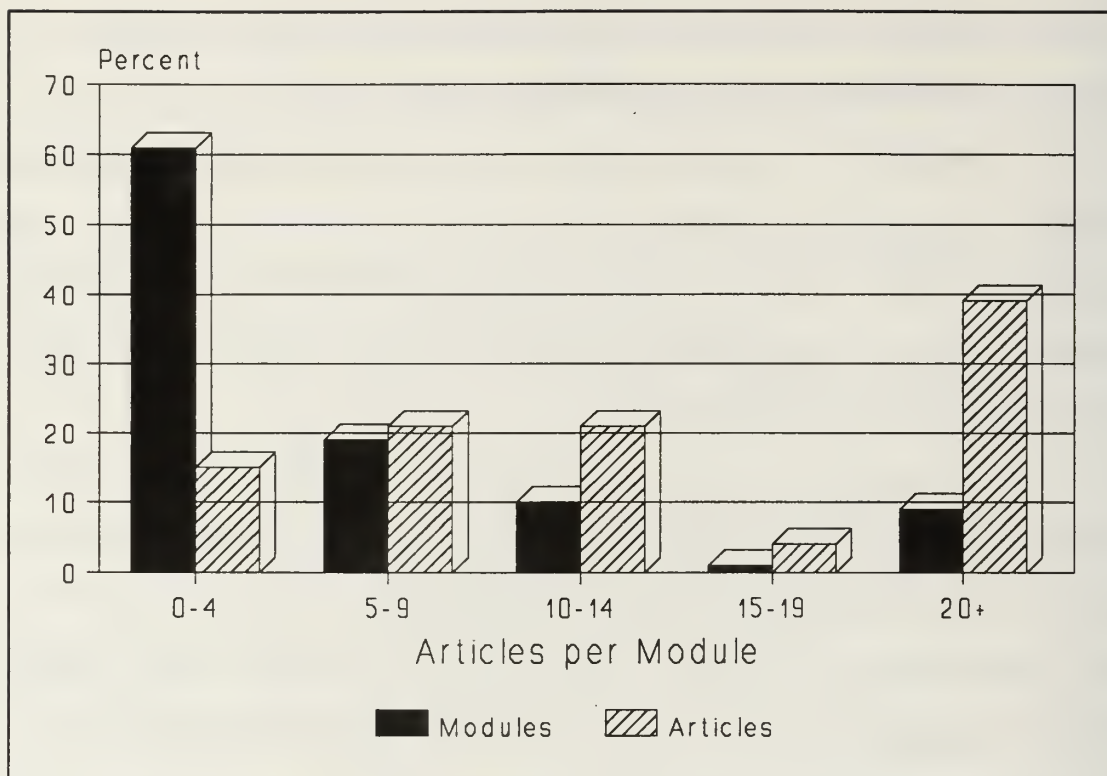


Figure 3-7: Modules vs. Articles

The foregoing analysis of the subject matter content of the articles published in the *National Contract Management Journal* suggests the literature covers a broad range of subjects. It also indicates a large share of the literature concentrates on a small number of subjects. Before accepting this information conclusively, two aspects warrant consideration. The first involves the number of modules with no articles assigned; the second concerns the modules that had a large number of articles assigned.

There were 16 (23%) modules that had no articles assigned. This indicates the coverage is not as comprehensive

as previously suggested. However, several modules had articles assigned to them for lack of a more appropriate module. For example, the subjects of procurement research and professional training are not identified in the Body of Knowledge. Articles on these subjects were assigned to Module 23, Procurement Organization and Management, or Module 24, The Procurement Process.

Unused modules decrease the range of subjects covered. Conversely, the lack of modules for certain subjects suggests the range is actually larger than the results indicate. This researcher tends to view these two aspects as offsetting each other. This leads to the conclusion the literature is fairly comprehensive in its coverage of the Body of Knowledge.

In summary, this analysis of the subject matter content of the literature leads to the following conclusions: (1) the literature touches most of the subjects identified in the Body of Knowledge, (2) most of the literature is dedicated to a small part of the Body of Knowledge, (3) subjects in the CONTRACTS AND PROCUREMENT group dominate the literature, (4) accounting, finance, and legal subjects dominate the BASIC TOOLS AND FUNCTIONS group, (5) neither management, pre-award, or post-award subjects dominate the CONTRACTS AND PROCUREMENT group, (6) special topics dominate the SPECIAL TOPICS AND CONSIDERATIONS group, and (7) 14 specific subject modules are emphasized in the literature.

3. Hybrid Results

This subsection examines unique results generated by the expanded taxonomy. The results are unique because they could not be generated by subject matter classification or with Sweeney's Taxonomy. In this sense, the expanded taxonomy represents a synergistic improvement.

Figures 3-8 through 3-22 describe how articles dedicated to each of the 14 subject matter categories emphasized in the literature were classified by Sweeney's Taxonomy. Analysis of these results should identify how articles about the same subject were classified.

Each subject matter category was analyzed to determine which TYPE OF ARTICLE, NATURE OF ARTICLE, BASIS FOR ANALYSIS, and APPROACH TO REACHING CONCLUSIONS categories were used most often. In all 14 subjects, non-empirical evidence was predominantly used to support the authors' conclusions. This being the case, the BASIS FOR ANALYSIS category will generally not be addressed in the following analysis.

Similarly, in all of the subjects, either inductive logic or no particular logic was predominantly used in reaching conclusions. For the most part, deductive articles were the exception. This being the case, the 14 subjects will be analyzed to determine if an inductive or deductive approach was used in reaching conclusions.

Figure 3-8 indicates articles that discussed cost accounting standards were mostly theoretical (63%) and

Module 6: Cost Accounting Standards

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	Total
Theoretical/Conceptual				3	1		1			2		3	10
Practical/Managerial				1								5	6
Professional/Education													
Total				4	1		1			2		8	16

6

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-8: Module 6

descriptive (69%). Half of the articles used a logical approach and half demonstrated no particular logic. Although most articles were the theoretical type, the most often used category was the practical-positive-non-empirical-no particular logic category. Five of 16 (31%) articles were assigned to this category. Most of these articles tended to describe and interpret various aspects of the standards. Kenneth M. Jackson's article "Recent Developments in Cost Allowability and Cost Accounting Standards" is representative of this type of article.

Figure 3-9 indicates articles that emphasized elements of business finance were usually theoretical (76%), descriptive ((57%), and either inductive or deductive (71%). The most popular category was the theoretical-normative-non-empirical-inductive category. These articles typically discussed aspects of risk, incentives, progress payments, and profit in Government contracting.

Figure 3-10 indicates articles that discussed breaches and remedies were primarily theoretical (62%), descriptive (69%), and either inductive or deductive (62%). Articles on this subject usually discussed a specific legal concept or issue such as impossibility of performance, liability, or extraordinary relief. William H. Butterfield's article "Scanwell Completes the Full Circle" is representative of this type of article.

Module 7: Elements of Business Finance

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual		1		5	2		3			2		3	16
Practical/ Managerial				1						1		3	5
Professional/ Education													
Total		1		6	2		3			3		6	21

7

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-9: Module 7

Module 22: Breaches & Remedies

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual				1	3					2		2	8
Practical/ Managerial										2		3	5
Professional/ Education													
Total				1	3					4		5	13

22

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-10: Module 22

Figure 3-11 indicates articles that addressed procurement organization and management tended to be theoretical (48%), normative (52%), and either inductive or deductive (68%). Figure 3-11 also indicates 12 of 31 (39%) articles were empirical, a significantly higher percent than found in other subject areas. This result is influenced by the assignment of a number of articles emphasizing professionalism and procurement research to Module 23. These articles often presented survey results as empirical evidence. Finally, Figure 3-11 indicates nine of the ten (90%) articles classified as professional type articles were assigned to this module.

Figure 3-12 indicates articles that discussed the procurement process were most often theoretical (66%), descriptive (59%), and either inductive or deductive (69%). This result indicates a significant share of the articles on the procurement process were prescriptive articles (41%). Articles in this module addressed a variety of subjects, from the roles of Government agencies to identification of problems with the procurement process.

Figure 3-13 indicates articles dedicated to the statutory and regulatory foundation are primarily theoretical (69%), descriptive (69%), and either inductive or deductive (69%). Many of the articles assigned to module 25 would describe a particular law or regulation, followed by a review of relevant court decisions. Dominic A. Femino and Laurence M.

Module 23: Procurement Organization & Management

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual	3	1		1	3	1	3					3	15
Practical/ Managerial	1			1	1							4	7
Professional/ Education				1	2	1	4					1	9
Total	4	1		3	6	2	7					8	31

NCMA Body of Knowledge Module:

23

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-11: Module 23

Module 24: The Procurement Process

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual	1			5	2	1	3			2	2	3	19
Practical/ Managerial					2					2		5	9
Professional/ Education				1									1
Total	1			6	4	1	3			4	2	8	29

24

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-12: Module 24

Module 25: Statutory & Regulatory Foundation

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual				2	2					4	1		9
Practical/ Managerial												4	4
Professional/ Education													
Total				2	2					4	1	4	13

25

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-13: Module 25

Smail's article "The Freedom of Information Act and Federal Acquisition: The Proper Balancing of Competing Interests" is representative of this type of article.

Figure 3-14 indicates articles about different types of contracts were almost equally divided between theoretical (52%) and practical (48%), tended to be descriptive (56%), and were usually inductive or deductive (72%). Since a significant share of the articles were descriptive, one might have expected a greater number of the articles to be purely descriptive with no particular logic. However, many of the articles went beyond mere description, conclusively stating the advantages and/or disadvantages associated with different contract types. William D. Mack's article "Cost-Plus-Percentage-of-Cost" is representative of this type of article.

Figure 3-15 indicates articles on the claims, disputes, and appeals processes were most often theoretical (79%), descriptive (63%), and either inductive or deductive (54%). The relatively small share of practical articles may indicate much of the disputes and appeals processes are beyond the control of the manager.

Figure 3-16 indicates articles dedicated to monitoring contract performance typically are practical (80%), descriptive (60%), and demonstrate no particular logic (60%). Half of the ten articles that emphasized this subject were purely descriptive and classified as practical-positive-non-empirical-no particular logic. Most of these articles were

Module 33: Contract Types

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual				5	1		5			1		1	13
Practical/ Managerial		2		2		1				2		5	12
Professional/ Education													
Total		2		7	1	1	5			3		6	25

33

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-14: Module 33

Module 40: Claims, Disputes & Appeals

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual				4	2	3	1			6		3	19
Practical/ Managerial												5	5
Professional/ Education													
Total				4	2	3	1			6		8	24

40

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-15: Module 40

Module 43: Monitoring Contract Performance

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual	1									1			2
Practical/ Managerial				2		1						5	8
Professional/ Education													
Total	1			2		1				1		5	10

43

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-16: Module 43

usually quite specific, discussing particular monitoring systems and/or applications. Richard A. Terselic and Louis M. Carrese's article "Monitoring Technical Progress in Research and Development Contracts" is representative of this type of article.

Figure 3-17 indicates articles that emphasized cost and price analysis were almost equally split between theoretical (48%) and practical (52%), and prescriptive ((52%) and descriptive (48%). They also tended to use a logical approach (61%). Interestingly, 80 percent of the descriptive articles demonstrated no particular logic; they often described a specific pricing method or element of cost. The large share of prescriptive articles indicates this is an area procurement professionals consider ripe for innovation and improvement.

Figure 3-18 indicates articles that concentrated on contract auditing were most often theoretical (67%), descriptive (83%), and either inductive or deductive (67%). Access to contractor records and the roles of audit agencies were prevalent themes of these articles. The small share of practical articles on this subject may indicate contract audit is a third-party function beyond the control of procurement managers.

Figure 3-19 indicates articles that emphasized systems acquisition tended to be theoretical (64%), descriptive (71%), and either inductive or deductive (57%). Most of these

Module 46: Cost & Price Analysis

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual	2	3		2	3		1					4	15
Practical/ Managerial	1			2	3		1			1		8	16
Professional/ Education													
Total	3	3		4	6		2			1		12	31

46

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-17: Module 46

Module 47: Contract Auditing

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual				1						3	2	2	8
Practical/ Managerial				1							1	2	4
Professional/ Education													
Total				2						3	3	4	12

47

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-18: Module 47

Module 50: Systems Acquisitions

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual				3						3		3	9
Practical/ Managerial					1					1		3	5
Professional/ Education													
Total				3	1					4		6	14

50

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-19: Module 50

articles described the concept of major weapon systems acquisition or phases of the systems acquisition process. Theoretical-normative articles on this subject generally recommended fundamental changes in the way major systems are procured. For example, Jacques S. Gansler's article "Affording Defense: The Changes That Are Needed" suggests a strategy to correct significant mismatches between the stated national security strategy and the forces needed to implement that strategy.

Figure 3-20 indicates articles that stressed socioeconomic objectives were usually theoretical (79%), descriptive (64%), and either inductive or deductive (79%). Most of these articles discussed the historical aspects, intentions, and implementation of social legislation and its impact on Government procurement.

Figure 3-21 indicates articles that emphasized international procurement were primarily theoretical (58%), descriptive (92%), and demonstrated no particular logic (75%). Most of these articles were overviews designed to expose the acquisition and contracting community to an area of procurement few experience. John S. W. Fargher's article "Defense Contract Management in Multinational Programs" is representative of this type of article.

This analysis of the subject matter categories emphasized in the *National Contract Management Journal* indicates most of the articles in most of the subject areas

Module 57: Socioeconomic Objectives

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual	4						1			4	1	1	11
Practical/ Managerial					1							2	3
Professional/ Education													
Total	4				1		1			4	1	3	14

57

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-20: Module 57

Module 63: International Purchasing

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual					1					2		4	7
Practical/ Managerial												5	5
Professional/ Education													
Total					1					2		9	12

63

NCMA Body of Knowledge Module:

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 3-21: Module 63

tend to be theoretical, positive, non-empirical, and either inductive or deductive. This was anticipated, since earlier analysis led to the conclusion that most of the literature was theoretical, positive, non-empirical, and based on inductive or deductive logic.

This analysis has shown that each subject area has its own classification tendencies. This indicates the foregoing conclusion is general, not universal, in its application to articles grouped by subject.

E. SUMMARY

This chapter was a summary analysis of the results of applying the expanded taxonomy to the complete library of the *National Contract Management Journal*. Prior to presenting this analysis, this chapter discussed application of the expanded taxonomy and problems encountered.

This analysis was presented in three parts. The first part analyzed the taxonomical results generated by the categories in Sweeney's Taxonomy. The second part analyzed the results of classifying the literature by subject matter. The final part analyzed the unique results generated by the expanded taxonomy. This analysis led to conclusions about the focus of the literature.

The next chapter will be a time-series analysis of the results. It will yield information about trends in the literature.

IV. TIME-SERIES ANALYSIS

A. INTRODUCTION

This chapter presents the second phase of an analysis of the results of classifying 24 years of the *National Contract Management Journal*. It is a time-series analysis that examines the results in four six-year intervals:

- 1966-71 (Volume 1, Number 1 through Volume 5, Number 2)
- 1972-77 (Volume 6, Number 1 through Volume 11, Number 2)
- 1978-83 (Volume 12, Number 1 through Volume 17, Issue 2)
- 1984-89 (Volume 18, Issue 1 through Volume 23, Issue 2)

The objective of this analysis is to identify trends in the literature and to gain an understanding of the evolution of the acquisition and contracting field.

B. TIME SERIES ANALYSIS

This analysis will be presented in three subsections. The first subsection examines the number of articles published during each time period. The second subsection examines the classification results generated by Sweeney's Taxonomy. The third subsection examines the results generated by classifying the articles by subject matter content.

1. Article Publication Results

As Figure 4-1 indicates, the number of articles published during each interval varied: 88 (21%) in 1966-71, 120 (29%) in 1972-77, 125 (30%) in 1978-83, and 80 (20%) in 1984-89. This indicates there were 36 percent more articles published in 1972-77 than in 1966-71.

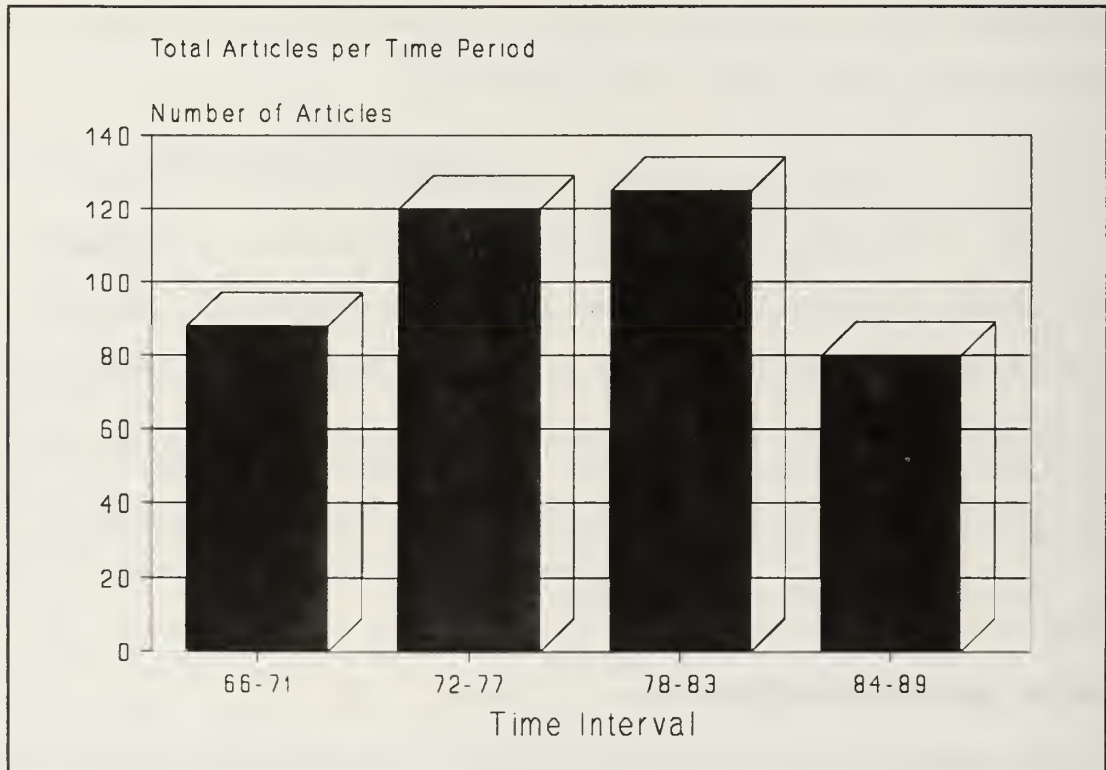


Figure 4-1: Number of Articles Published During Different Intervals

There are at least two possible explanations for this trend. First, 1966-71 represents a start-up period during which the *National Contract Management Journal* established itself as a forum for the procurement community. As it gained

recognition as a conduit for the communication of acquisition and contracting knowledge, contributions from the workforce increased.

Second, the 1970's may have been a particularly dynamic period for the acquisition and contracting field. During this period, for example, Congress became increasingly reliant upon the procurement process as a vehicle for implementing socioeconomic policy, the Cost Accounting Standards were introduced, and computer technology found thousands of applications in the field. These developments had a significant impact on the field and required dissemination to the acquisition and contracting community. The *National Contract Management Journal* was an ideal forum for discussing these developments.

This second explanation may also account for why 36 percent fewer articles were published in 1984-89 than 1978-83. The acquisition and contracting field was by no means static during the later period. There were several major developments during 1984-89. The Competition in Contracting Act of 1984 (CICA) was one of them. However, compared to the 1970's and early 1980's, the period 1984-89 may have been a relatively stable period for the community.

An alternative explanation is that fewer authors of acquisition and contracting literature are selecting the *National Contract Management Journal* to publish their

articles. Instead, they may seek publication in alternative journals or magazines, such as *Contract Management*.

Conversely, another explanation might be the Editorial Board of the *National Contract Management Journal* has become more selective in the articles they elect to publish. Alternatively, there may be fewer persons in the acquisition and contracting community who believe it is their professional responsibility to publish.

This researcher is of the opinion the decrease in the number of articles published in the *National Contract Management Journal* is attributable to the current stability of the acquisition and contracting environment. However, other potential explanations for this decrease warrant investigation.

2. Taxonomical Results

Figures 4-2 through 4-5 are the results of applying Sweeney's Taxonomy to articles published during each time period. Recall that after classifying all the articles, 13 of 36 (36%) categories in Sweeney's Taxonomy were not used. Analysis of Figures 4-2 through 4-5 indicates a substantial variance in the number of unused categories during each period. There were 20 (56%) unused categories in the 1966-71 period, 14 (39%) in the 1972-77 period, 18 (50%) in the 1978-83 period, and 23 (64%) in the 1984-89 period.

1966-1971

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/Conceptual	4			17	5		6			10	3	8	53
Practical/Managerial	1	2		6	3	1				7	1	13	34
Professional/Education				1									1
Total	5	2		24	8	1	6			17	4	21	88

Normative = 40

Positive = 48

Empirical = 13

Non-Empirical = 75

Inductive = 52

Deductive = 14

No Particular Logic = 22

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 4-2: Taxonomical Classification, 1966-71

1972-1977

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual	4	2		11	12	2	4			17	2	7	61
Practical/ Managerial	1	1		4	7	4	1			8		27	53
Professional/ Education				1	1	1	2					1	6
Total	5	3		16	20	7	7			25	2	35	120

Normative = 51 Positive = 69

Empirical = 15 Non-Empirical = 105

Inductive = 53 Deductive = 25 No Particular Logic = 42

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 4-3: Taxonomical Classification, 1972-77

1978-1983

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						Total
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	
Theoretical/ Conceptual	8	4		11	10	2	8			15	2	18	78
Practical/ Managerial	2			6	4	1	1			1		30	45
Professional/ Education					1		1						2
Total	10	4		17	15	3	10			16	2	48	125

Normative = 49 Positive = 76

Empirical = 24 Non-Empirical = 101

Inductive = 53 Deductive = 21 No Particular Logic = 51

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 4-4: Taxonomical Classification, 1978-83

1984-1989

Nature of Article	Normative (Prescriptive)						Positive (Descriptive)						
Basis for Analysis	Empirical			Non-Empirical			Empirical			Non-Empirical			
Approach to Reaching Conclusions	I	D	NPL	I	D	NPL	I	D	NPL	I	D	NPL	Total
Theoretical/Conceptual	3			10	7		4			10	5	9	48
Practical/Managerial				6	1	3					1	20	31
Professional/Education							1						1
Total	3			16	8	3	5			10	6	29	80

Normative = 30

Positive = 50

Empirical = 8

Non-Empirical = 72

Inductive = 34

Deductive = 14

No Particular Logic = 32

I = Inductive reasoning D = Deductive reasoning NPL = No Particular Logic

Source: R. F. Sweeney thesis and researcher's analysis

Figure 4-5: Taxonomical Classification, 1984-89

This result is influenced by the number of articles published during each period. With one notable exception, when the number of articles published during a period increased, the number of unused categories decreased. The exception occurred between 1972-77 and 1978-83: the number of articles increased by four percent (from 120 to 125 articles), and the number of unused categories increased 11 percent (from 14 to 18 unused categories).

The variance in unused categories is partially explained by the number of professional/education articles published during each period. Five categories were used to classify six articles of this type published during 1972-77. Only two professional/education articles were published during 1978-83; each was placed in a separate category.

Recall that Sweeney's Taxonomy classified articles by TYPE OF ARTICLE, NATURE OF ARTICLE, BASIS FOR ANALYSIS, and APPROACH TO REACHING CONCLUSIONS. Analysis of the results in Figures 4-2 through 4-5 will indicate if there are trends in these categories.

Figure 4-6 depicts the number of articles assigned to the theoretical, practical, and professional categories in the TYPE OF ARTICLE category. Since the number of articles published during each period varied, these results are presented as percentages of the number of articles published each period. Figure 4-7 depicts the results in this manner.

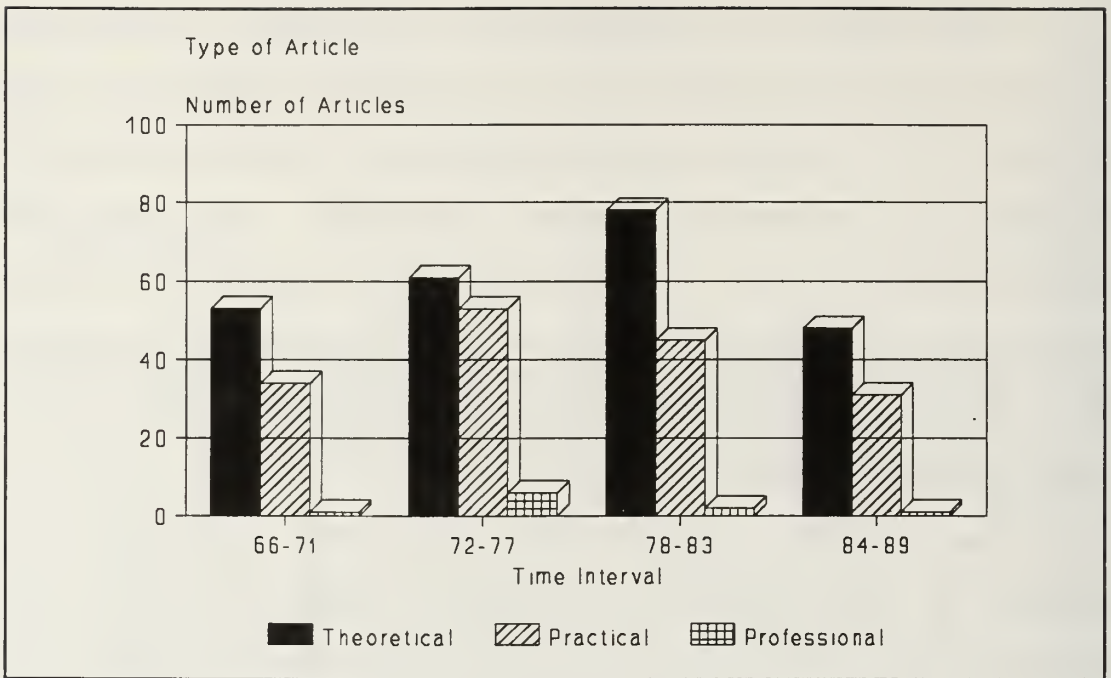


Figure 4-6: TYPE OF ARTICLE Results

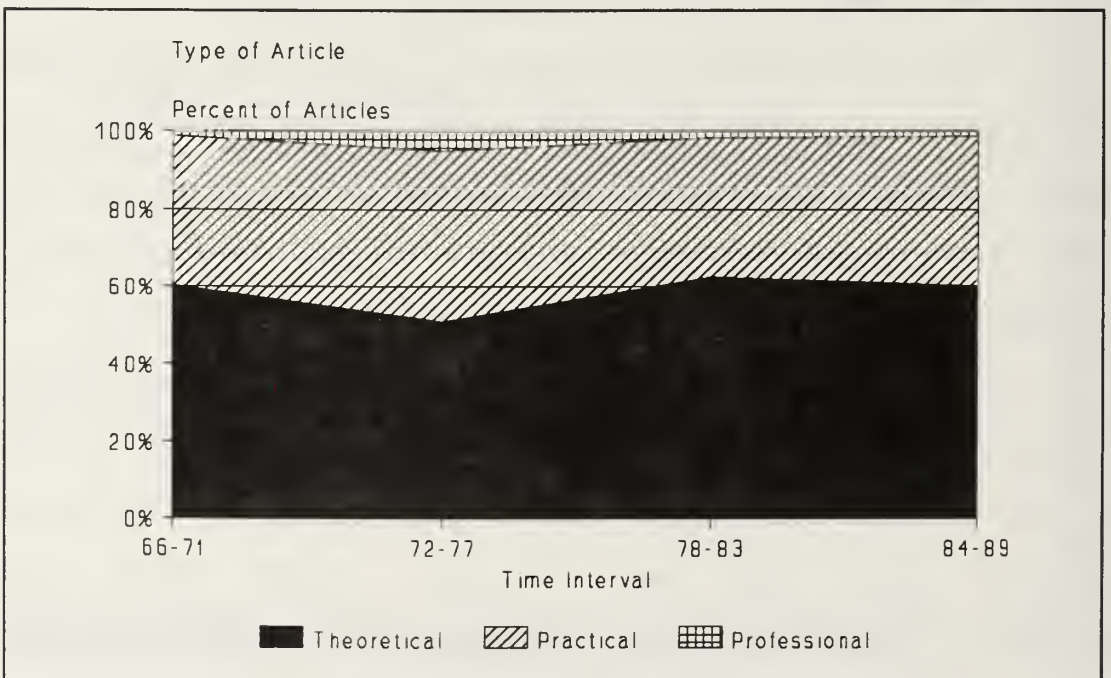


Figure 4-7: TYPE OF ARTICLE Results (percent of articles published each period)

Figure 4-7 indicates the percentages of theoretical, practical, and professional articles have remained relatively constant around 60 percent, 39 percent, and one percent, respectively. These percentages vary slightly from the summary analysis results presented in Chapter III: 58 percent of the articles were theoretical, 40 percent were practical, and two percent were professional.

An explanation for this variance is clearly evident in Figure 4-7. There was a significantly greater number of professional articles published during 1972-77. The six professional articles represented five percent of the articles published during the period, 3.1 to 4.4 times the percentage of professional articles published during other periods.

Figures 4-8 and 4-9 depict the number and percentage of articles assigned to the NATURE OF ARTICLE categories during each period. Recall from the summary analysis presented in Chapter III that overall, 41 percent of the articles were normative (prescriptive) and 59 percent were positive (descriptive).

Figure 4-9 clearly indicates a gradual decrease in the percentage of normative articles published in the *National Contract Management Journal*. During the period 1966-71, 46 percent of the articles published recommended changes in the acquisition and contracting field. The share of normative articles decreased each period, falling to 38 percent of the literature during 1984-89.

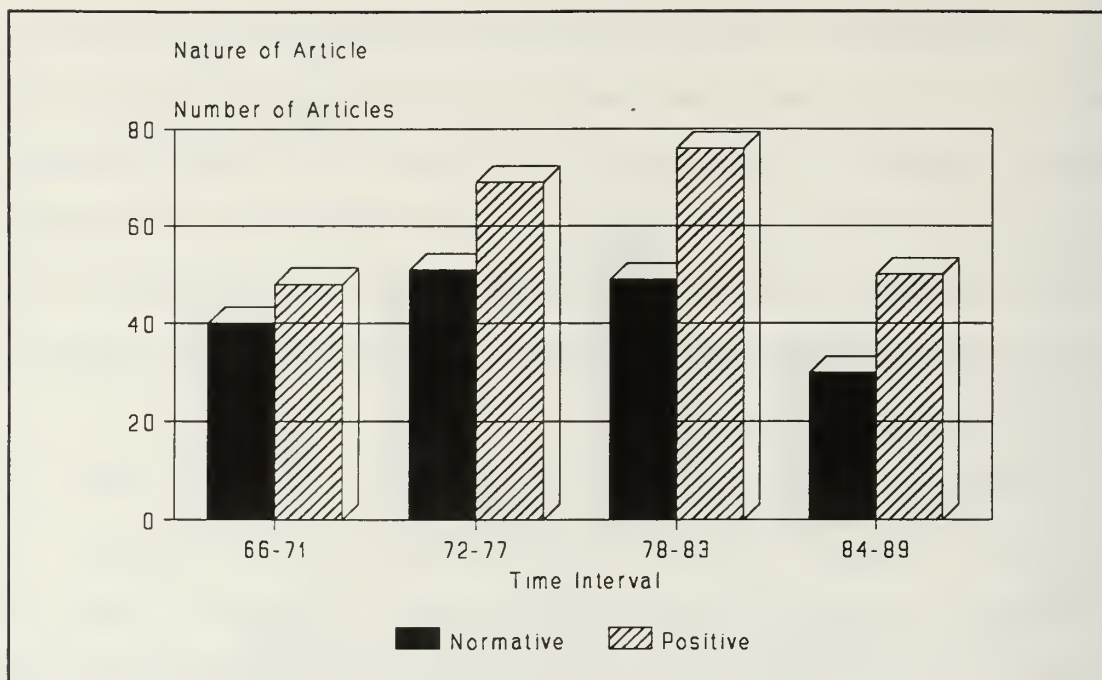


Figure 4-8: NATURE OF ARTICLE Results

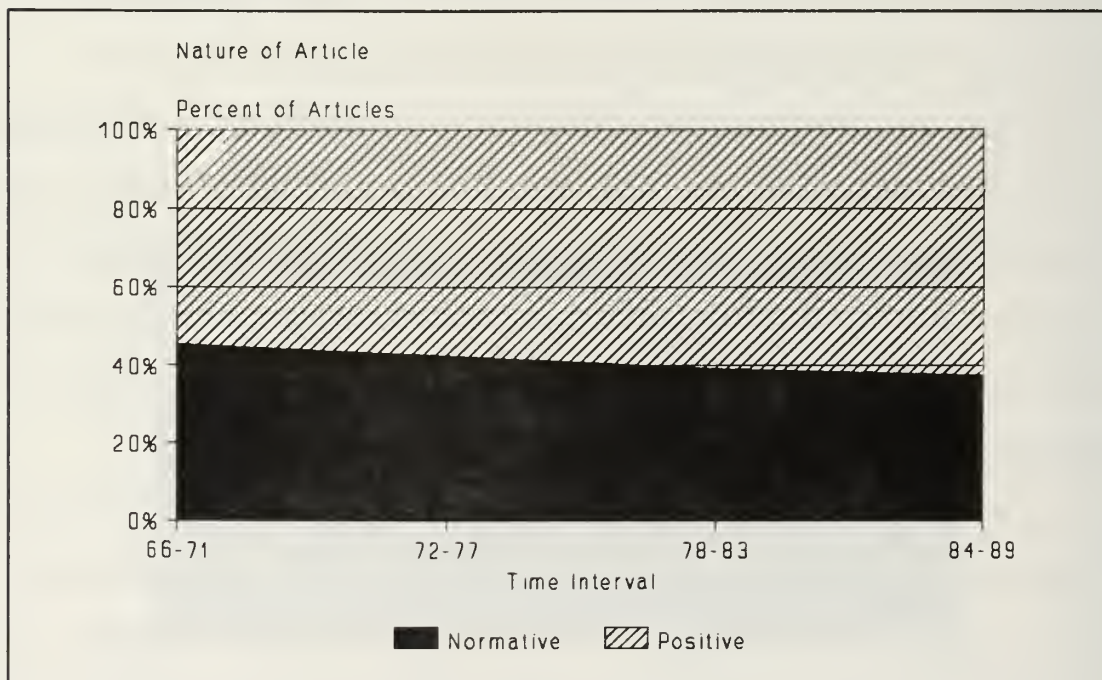


Figure 4-9: NATURE OF ARTICLE Results (percent of articles published each period)

This trend towards publication of a greater share of descriptive articles is not a favorable trend. In Chapter III, it was suggested one explanation for the predominance of positive versus normative articles may lie in the complexity of the acquisition and contracting field. If that explanation is accepted, the increasing share of positive articles indicates the field is becoming increasingly complex. In the previous subsection, it was noted fewer articles were published in the *National Contract Management Journal* during 1984-89 than earlier periods. One explanation suggested this was the case because the field was relatively more stable than during prior periods.

Portraying the acquisition and contracting environment as being more stable and increasingly complex may appear conflicting. However, if one accepts that the procurement environment during 1984-89 was characterized by few major legislative and/or regulatory changes, it could be described as stable. And if one considers the plethora of minor statutory and/or regulatory requirements promulgated in recent years, it is also clear the procurement environment has become increasingly complex.

This leads to one final explanation for the decreasing share of articles recommending improvement. Given the stability and complexity of the acquisition and contracting environment, fewer procurement professionals may believe they are capable of influencing changes in the procurement system.

These individuals might be more inclined to publish normative articles if they believed they might lead to change.

Figures 4-10 and 4-11 depict the number and percentages of articles assigned to each of the BASIS FOR ANALYSIS categories during each period. The percentage of empirical articles varied substantially during each period: 15 percent in 1966-71, 13 percent in 1972-77, 19 percent in 1978-83, and 10 percent in 1984-89.

No particular trend is apparent in the BASIS FOR ANALYSIS category during the 24-year period the *National Contract Management Journal* has been in publication. However, this analysis does indicate there was a 47 percent decrease in the share of empirical articles published in 1984-89 versus 1978-83. This trend suggests fewer authors are supporting their conclusions with empirical evidence. This is a surprising result, given the abundance of computer-oriented databases, the availability of sophisticated sampling and surveying techniques, and the accessibility to Government information under the Freedom of Information Act (FOIA). However, given the increasing predominance of descriptive articles in the *National Contract Management Journal*, it is less surprising there has been a decrease in the percentage of empirical articles. As discussed in Chapter III, authors who write descriptive articles are less likely to use empirical evidence.

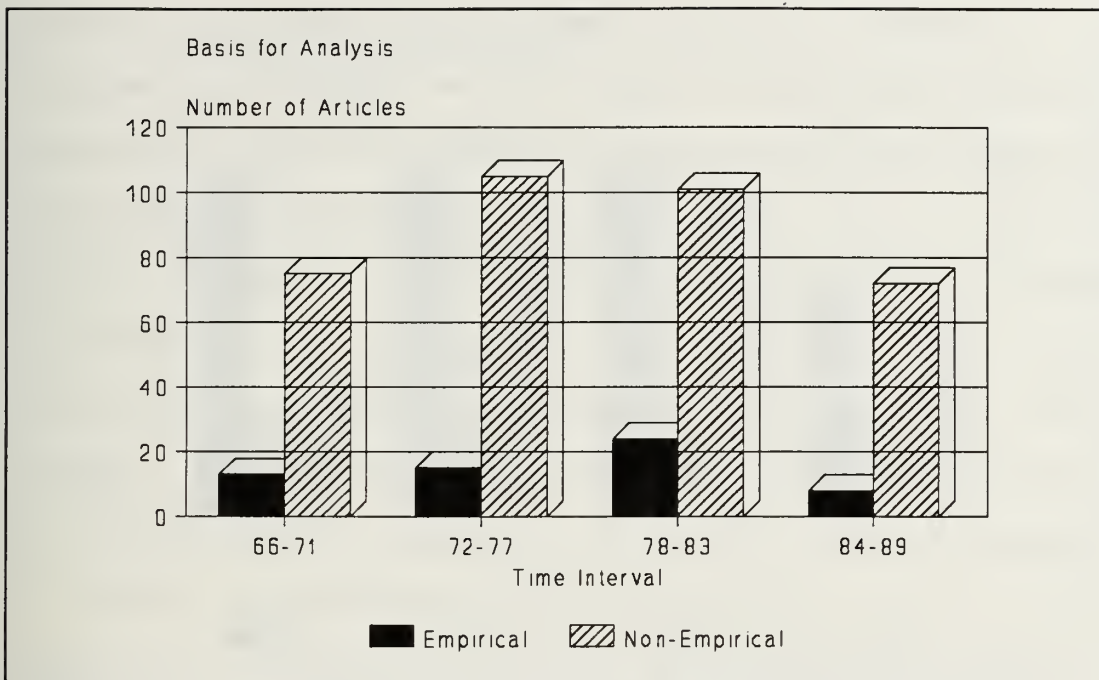


Figure 4-10: BASIS FOR ANALYSIS Results

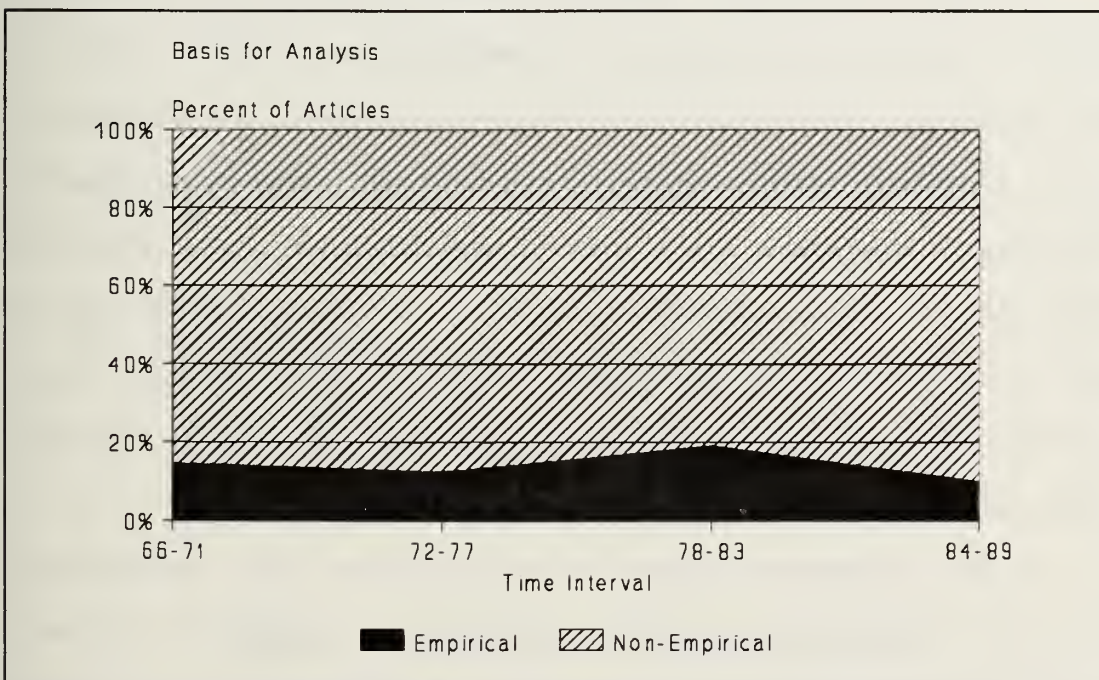


Figure 4-11: BASIS FOR ANALYSIS Results (percent of articles published each period)

Figures 4-12 and 4-13 depict the number and percentage of articles assigned to each of the APPROACH TO REACHING CONCLUSIONS categories during each period. Figure 4-13 clearly indicates a trend in the APPROACH TO REACHING CONCLUSIONS category. During the period 1966-71, 75 percent of the articles demonstrated either an inductive or deductive approach to reaching conclusions. This share had decreased to 60 percent of the articles published during 1984-89. Consequently, the share of articles demonstrating no particular logic increased from 25 percent during 1966-71, to 40 percent during 1984-89.

Closer analysis reveals the share of inductive articles actually decreased 17 percentage points, and the share of deductive articles actually increased two percentage points. Overall, this result indicates there has been a significant decrease in the percentage of articles demonstrating an inductive approach, a slight increase in the share of articles demonstrating a deductive approach, and a substantial increase in the percentage of articles demonstrating no particular form of logic.

The increased emphasis on articles that are purely descriptive (demonstrating no particular logic) is closely related to trends discovered earlier in this analysis. Given the trend towards increasing the predominance of descriptive, non-empirical articles, it could reasonably be anticipated the share of purely descriptive articles would also increase.

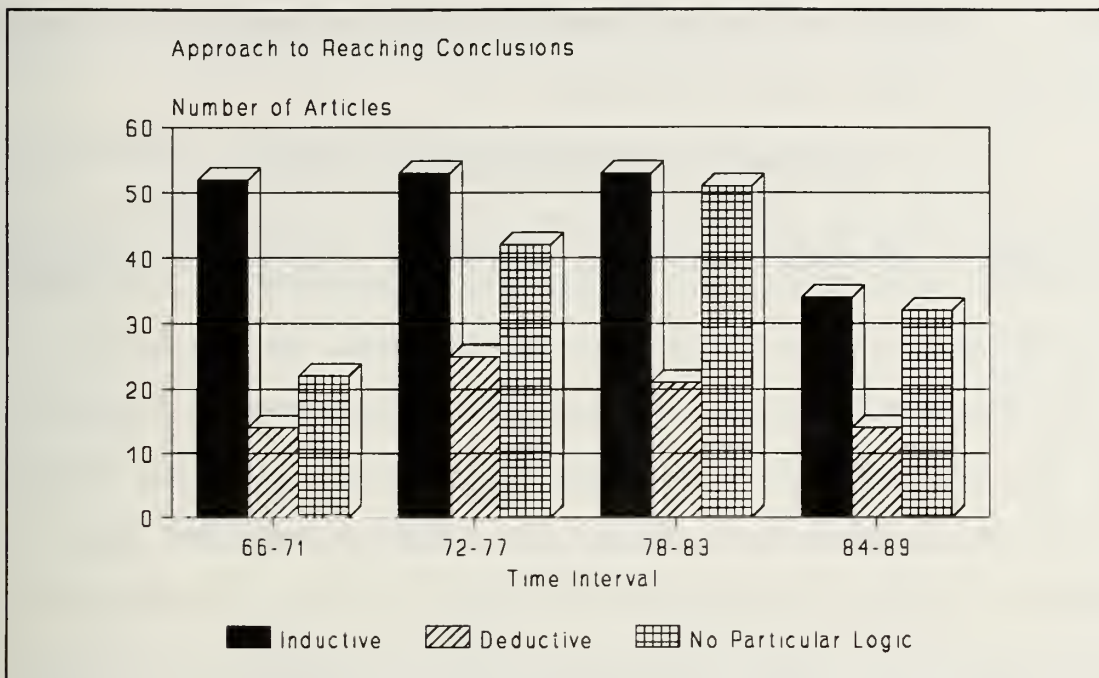
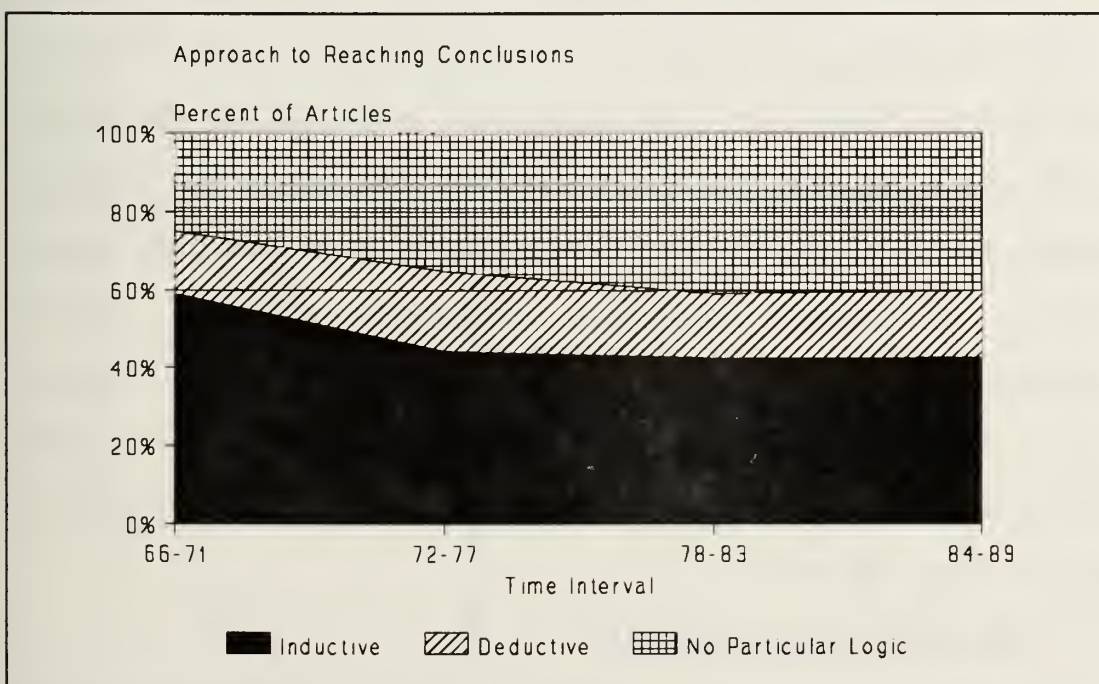


Figure 4-12: APPROACH TO REACHING CONCLUSIONS Results



**Figure 4-13: APPROACH TO REACHING CONCLUSIONS Results
(percent of articles published each period)**

However, the size of the increase in articles demonstrating no particular logic was surprising.

This trend in the literature may be another indication of how complex the acquisition and contracting environment has become. As statutory and regulatory requirements increase, practitioners in the field must be informed. As the number of dispute cases multiplies, members of the procurement community must be educated on the disputes process. And as highly publicized accounts of unauthorized cost recoveries lead to charges of workforce deficiencies, procurement professionals may be compelled to publish descriptive, procedural articles.

This time series analysis of the taxonomical results has indicated several trends in the literature, including (1) significantly fewer articles were published during the period 1984-89 than in previous periods, (2) the share of articles assigned to the TYPE OF ARTICLE category has remained fairly constant, (3) there has been a steady decrease in the percentage of normative articles, and (4) there has been a significant decrease in the percentage of articles demonstrating either an inductive or deductive approach in reaching conclusions.

3. Subject Matter Results

Table 4-1 displays the results of classifying the literature by subject matter content (module titles are listed in Appendix A). The results are subdivided to correspond with

TABLE 4-1: NUMBER OF ARTICLES PER MODULE PER PERIOD

ARTICLES PER MODULE PER PERIOD

MODULE	1966-71	1972-77	1978-83	1984-89	TOTAL
1			1	1	
2					
3		1		1	
4					
5	2	2	1	5	
6	<u>4</u>	<u>10</u>	2	16	
7	3 <u>7</u>	3	<u>8</u>	21	
8					
9					
10					
11	1	1	2	4	
12					
13	1			1	
14					
15					
16	1			1	
17	1 2			3	
18					
19					
20			2	2	
21	1	1		2	
22	1 <u>8</u>	2	2	13	
23	2 <u>16</u>	<u>10</u>	3	31	
24	<u>12</u> <u>4</u>	<u>6</u>	<u>7</u>	29	
25	<u>4</u>	<u>9</u>		13	
26	1 2			3	
27	1	2	1	4	
28	1	1	2	4	
29					
30	1 2	<u>5</u>	1	9	
31		3		3	
32	1 2	1		4	
33	<u>11</u> 2	<u>8</u>	<u>4</u>	25	
34	<u>5</u>	2		7	
35	1 2			3	

TABLE 4-1 (cont.): NUMBER OF ARTICLES PER MODULE PER PERIOD

MODULE	1966-71		1972-77	1978-83	1984-89	TOTAL
36	3	1	2		6	
37	3	2	3		8	
38				1	1	
39	3	2			5	
40	<u>5</u>	<u>10</u>	<u>8</u>	<u>1</u>	24	
41	1	1	1		3	
42	3	1		2	6	
43	3	<u>5</u>		2	10	
44						
45	1		2	<u>5</u>		
46	<u>8</u>	<u>8</u>	<u>10</u>	<u>5</u>	31	
47	2	3	2	<u>5</u>	12	
48	1	2	1		4	
49			1		1	
50	<u>4</u>	<u>4</u>	3	3	14	
51	1	3	1		5	
52			2		2	
53	1		1		2	
54	1	1		<u>6</u>	8	
55		1			1	
56						
57		<u>6</u>	<u>5</u>	3	14	
58			2	<u>5</u>	7	
59						
60	2	3	2	1	8	
61						
62						
63	1	2	<u>8</u>	1	12	
64		2	1	2	5	
65			1		1	
66				1	1	
67	2		2		4	
68	3	1			4	
69				1	1	
TOTAL	88	120	125	80	413	

the time periods articles were published. Analysis of the results will indicate which subjects have been emphasized during different time periods.

For purposes of further analysis, this researcher will define a subject as having been emphasized during one of the six-year periods, if it was the subject of four or more articles during a period. The underlined/bold print numerals in Table 4-1 mark the assignment of four or more articles to a module during a single time period.

Analysis of Table 4-1 indicates six of 69 (9%) subjects were emphasized during 1966-71. There were 44 articles on these subjects, 50 percent of the literature published during this period. Therefore, 50 percent of the literature published during 1966-71 was dedicated to nine percent of the Body of Knowledge.

There were 11 (16%) subjects emphasized during 1972-77. There were 77 articles on these subjects; 64 percent of the literature published during this period. Therefore, 64 percent of the literature published during 1977-77 was dedicated to 16 percent of the Body of Knowledge.

There were 10 (14%) subjects emphasized during 1978-83. There were 79 articles on these subjects; 63 percent of the literature published during this period. Therefore, 63 percent of the literature published during 1978-83 was dedicated to 14 percent of the Body of Knowledge.

Finally, there were eight subjects emphasized during 1984-89. There were 45 articles on these subjects; 56 percent of the literature published during this period. Therefore, 56 percent of the literature published during 1984-89 was dedicated to 12 percent of the Body of Knowledge.

The preceding analysis indicates there is a relationship between the volume of articles published and the share of the Body of Knowledge emphasized in the literature. An increase in the volume of articles is usually accompanied by an increase in the share of modules emphasized in the literature, and vice versa. This information suggests one way to increase the range of subjects emphasized in the *National Contract Management Journal* is to publish more articles.

One exception occurred during 1978-83: articles published increased from 120 in 1972-77 to 125 in 1978-83, and the share of modules decreased from 16 percent in 1972-77 to 14 percent in 1978-83. A comparison of the periods 1972-77 and 1978-82, specifically the number of articles (120 versus 125) published and the number of modules (11 versus 10) emphasized, indicates they are very similar. This similarity tends to minimize the impact of the exception.

Table 4-2 lists the subjects that were emphasized during at least one of the time periods (assignments of three articles or less to a module during a time period have been omitted). Table 4-2 indicates 19 subjects have been emphasized in the literature. Recall from the summary analysis, presented

TABLE 4-2: EMPHASIZED SUBJECTS

EMPHASIZED SUBJECTS

MODULE	DESCRIPTION	66-71	72-77	78-83	84-89
6	Cost Accounting Standards		4	10	
7	Business Finance		7		8
22	Breaches & Remedies		8		
23	Procurement Organization & Management		16	10	
24	The Procurement Process	12	4	6	7
25	Statutory & Regulatory Foundation	4		9	
30	Solicitations, Bids & Awards		5		
33	Contract Types	11		8	4
34	Source Selection		5		
40	Claims, Disputes, & Appeals	5	10	8	
43	Monitoring Contract Performance		5		
45	Patent & Data Rights				5
46	Cost & Price Analysis	8	8	10	5
47	Contract Auditing				5
50	Systems Acquisition	4	4		
54	Ethics, Conflict of Interest				6
57	Socioeconomic Objectives		6	5	
58	Small & Minority Business Development				5
63	International Purchasing			8	
	TOTAL	44	77	79	45

in Chapter III, 14 subjects had been emphasized. This indicates five subjects were emphasized in the short-term (four or more articles in one of the six-year periods), but not in the long-term (a total of 10 or more articles). These subjects, presented in bold print in Table 4-2, were:

- Module 30: Solicitations, Bids, & Awards
- Module 34: Source Selection
- Module 45: Patent & Data Rights
- Module 54: Ethics, Conflict of Interest
- Module 58: Small & Minority Business Development

✓ Table 4-2 indicates the focus of the literature during the various periods has varied. Whereas some subjects were emphasized in the literature for only a short period of time, others have been emphasized throughout the 24-year history of the *National Contract Management Journal*. Analysis of Table 4-2 indicates two of the 19 (11%) subjects were emphasized during all four periods; they were:

- Module 24: The Procurement Process
- Module 46: Cost & Price Analysis

Table 4-2 indicates there were also two (11%) subjects emphasized during three of the four periods. They were:

- Module 33: Contract Types
- Module 40: Claims, Disputes & Appeals

There were six (32%) subjects emphasized during two of the four periods. They were:

- Module 6: Cost Accounting Standards
- Module 7: Elements of Business Finance
- Module 23: Procurement Organization & Management
- Module 25: Statutory and Regulatory Foundation
- Module 50: Systems Acquisitions
- Module 57: Socioeconomic Objectives

Nine subjects were emphasized in the literature during only one six-year time period. Five of these were previously identified; they were modules 30, 34, 45, 54, and 58. These subject areas were popular in the short-term, but not over the long-term. Four of the subjects emphasized in only one of the four time periods were also the subject of at least ten articles during the 24-year period. They were:

- Module 22: Breaches & Remedies
- Module 43: Monitoring Contractor Performance
- Module 47: Contract Auditing
- Module 63: International Procurement

This analysis suggests there are four subjects that more precisely define the core of the Body of Knowledge: the procurement process, cost and price analysis, contract types, and claims, disputes and appeals. The summary analysis, presented in Chapter III, suggested this was the case; these

modules were four of the five most often assigned modules in the Body of Knowledge. This analysis has demonstrated these subjects have also been consistently emphasized since the *National Contract Management Journal* began publication.

Analysis of Table 4-2 indicates specific subject matter trends in the literature. For example, Module 6, Cost Accounting Standards, was heavily emphasized during 1978-83. A number of the Standards were being implemented during this period. They drew widespread interest from most sectors of the procurement community. No articles emphasized the Cost Accounting Standards during 1984-89, a result at least partially attributable to the termination of the Cost Accounting Standards Board. With the recent re-establishment of the Board, one might expect a reversal of this trend during 1990-95.

Specific subject matter trends are clearly evident in Tables 4-1 and 4-2. General subject matter trends in the literature are more difficult to discern. Analysis of the results, sub-divided into the BASIC TOOLS AND FUNCTIONS, CONTRACTS AND PROCUREMENT, and SPECIAL TOPICS AND CONSIDERATIONS module category groups, will provide information on general subject matter trends.

Figures 4-14 and 4-15 depict the assignment of articles to the groups during the various time periods. Figure 4-15 indicates there has been a significant decrease in the share of the literature dedicated to CONTRACTS AND PROCUREMENT

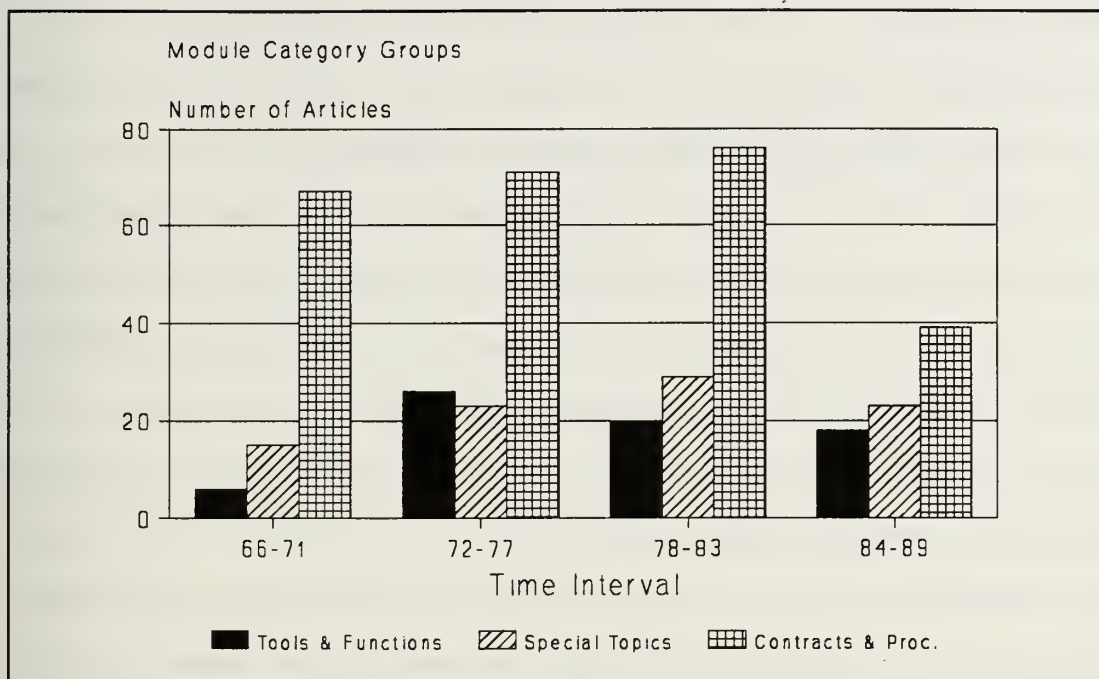


Figure 4-14: Module Group Result

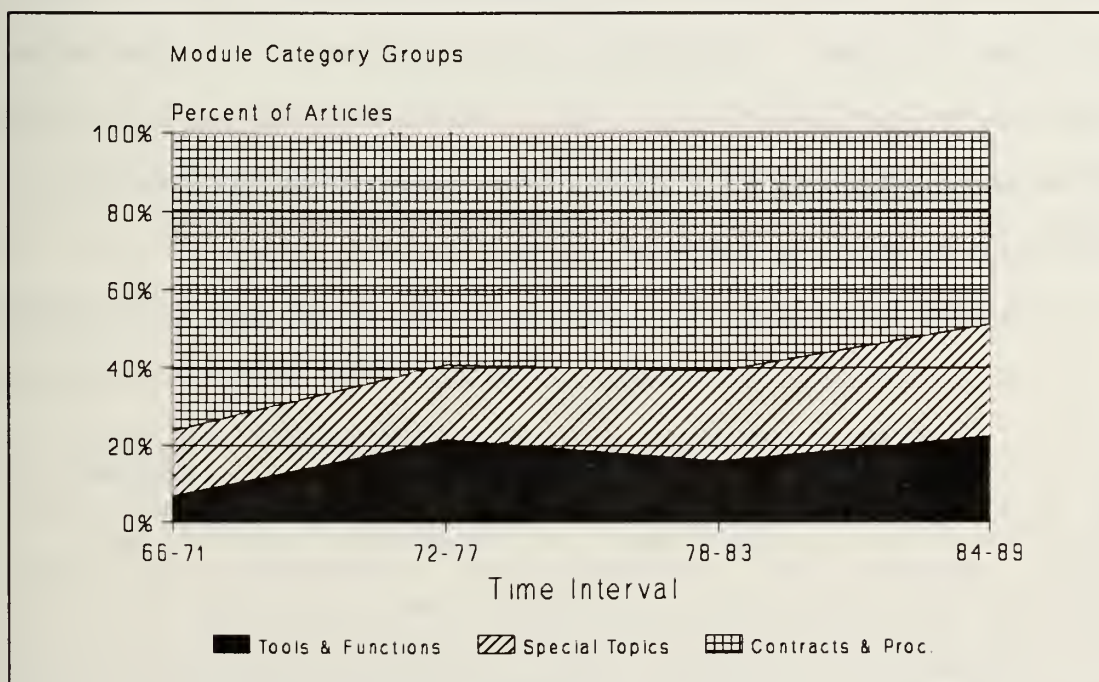


Figure 4-15: Module Group Results (percent of articles published each period)

subjects. There has been a substantial corresponding increase in the share of the literature emphasizing TOOLS AND FUNCTIONS subjects and SPECIAL TOPICS AND CONSIDERATIONS subjects.

The degree of the shift away from modules considered the core of the Body of Knowledge is a surprising result. The share of articles dedicated to the CONTRACTS AND PROCUREMENT subjects has fallen 27 percentage points, from 76 percent of articles published during 1966-71, to 49 percent of the articles published during 1984-89.

Meanwhile, the share of literature emphasizing BASIC TOOLS AND FUNCTIONSSubjects has increased from seven percent during 1966-71, to 22 percent during 1984-89: a gain of 15 percentage points. Similarly, the share of literature dedicated to SPECIAL TOPICS AND CONSIDERATIONS subjects has increased 12 percentage points, from 17 percent during 1966-71 to 29 percent during 1984-89.

There are several considerations that may contribute to an explanation of this result. The first concerns recognition of the *National Contract Management Journal* as a communications tool. As this journal became established as the premier channel for disseminating contracting knowledge throughout the contracting community (Sweeney, 1989, p. 4), it may have attracted a broader audience. Specialized contracting professionals, and practitioners from other disciplines, may have recognized the publication as an opportunity to discuss special contracting issues and inter-disciplinary topics.

A second consideration is stability in the procurement environment. Given the extent to which legislation, regulation, and oversight has increased since 1966, the basic procurement process is well-established and less subject to change. Stability in the procurement process may encourage authors to discuss other aspects of the field.

This time series analysis of the subject matter classification results has indicated several trends in the literature, including (1) the relationship between the volume of articles published and the share of subjects emphasized, (2) the number of subjects emphasized in the literature has varied during different time periods, (3) most of the topics emphasized in the literature have not been consistently emphasized in the literature, (4) there are four modules that more precisely define the core of the Body of Knowledge, and (5) there has been a significant decrease in the share of the literature dedicated to the core subjects in the Body of Knowledge.

C. SUMMARY

This chapter presented a time-series analysis of the results of applying the expanded taxonomy. The results were grouped into four six-year time periods for analysis. The first part of the analysis examined the number of articles published during each time period. Next, the taxonomical classification results were analyzed. Finally, the results

from classifying the articles by subject matter content were analyzed.

The fifth and final chapter will present conclusions and recommendations, based on the summary analysis presented in Chapter III, and the time-series analysis presented in this chapter. Answers to the research questions and suggestions for further research will also be presented.

V. CONCLUSIONS AND RECOMMENDATIONS

A. INTRODUCTION

This chapter will present conclusions and recommendations from the research, answer the primary and subsidiary research questions, and suggest areas for further research.

B. CONCLUSIONS

Several conclusions can be drawn from the research conducted in this study. First, the majority of the articles published in the *National Contract Management Journal* are theoretical/conceptual, descriptive, non-empirical, and demonstrate either an inductive or deductive approach in reaching conclusions. As detailed in Chapter IV, several trends were discovered regarding the primary taxonomical categories. Figure 4-7 indicates the share of the literature that was classified as theoretical/conceptual has remained fairly constant. Figure 4-11 indicates a similar trend in the share of the literature classified as non-empirical. Figure 4-9 indicates there has been a steady increase in the share of the literature classified as descriptive. Finally, Figure 4-13 indicates there has been a steady decrease in the share of the literature that demonstrates either an inductive or deductive approach.

Second, expanding Sweeney's Taxonomy to include subject matter classification is a synergistic improvement. It is a synergistic improvement because the expanded taxonomy yields unique results. These results are unique because they could not be generated by separately applying Sweeney's Taxonomy, or a subject matter classification system. They were generated by applying both classification systems to each article reviewed. Figures 3-8 through 3-21 illustrate this type of result. By applying the expanded taxonomy, the researcher was able to determine how articles dedicated to specific subjects fell into Sweeney's classification system categories.

Third, most of the literature published in the *National Contract Management Journal* is dedicated to a small part of the Body of Knowledge. Table 3-1 indicates the literature touches most of the 69 subjects identified in the Body of Knowledge. However, as Figure 3-7 indicates, almost two-thirds of the literature is dedicated to only one-fifth of the Body of Knowledge.

Fourth, subjects popularly considered to be the core of the Body of Knowledge have dominated the literature. These subjects are the contracting and procurement subjects identified in Body of Knowledge modules 23 through 48. However, as Figure 4-15 indicates, there has been a steady decline in this emphasis since the *National Contract Management Journal* began publication.

Fifth, very few subjects have been consistently emphasized in the literature. As detailed in Chapter IV, only two subjects (the procurement process, and cost and price analysis) were emphasized during all four of the six-year time periods established in the time-series analysis. Similarly, only two other subjects (contract types; and claims, disputes, and appeals) were emphasized during three of the four time periods. Table 4-2 indicates the extent that different subjects have been emphasized in the literature during various time periods.

C. RECOMMENDATIONS

Application of the expanded taxonomy to the complete library of the *National Contract Management Journal* has provided information about patterns and trends in the literature. This researcher has developed several recommendations resulting from this information. First, the professionals who comprise the acquisition and contracting community must be encouraged to publish. Time-series analysis indicated the number of articles published had decreased from 125 during 1978-83, to only 80 during 1984-89. The researcher has already suggested this decline may be attributable to the increasing complexity of the acquisition and contracting environment, and the perceived inability of the individual to affect the procurement process.

Under these circumstances, it is important to maintain the *National Contract Management Journal* as a vigorous forum for the exchange of information, opinions, and ideas. Absence of such a forum could contribute to the decline of the acquisition and contracting discipline:

One ultimate effect of more oversight and more laws is to make contracting officers less efficient in their work and more focused on contracting as an administrative process than on the ultimate purpose of filling the procurement needs of the agency...they are afraid to express ideas and afraid to act beyond their familiar routines. Contracting actions become mechanical; imagination, judgement and common sense dry up. (American Bar Association, 1987, p. 6)

This study also suggested there is a correlation between the number of articles and the range of subject matter emphasized in the literature. Encouraging members of the community to publish could ultimately lead to in-depth coverage of a larger share of the Body of Knowledge. This in turn could enhance the knowledge, and improve the confidence, of the community.

A second recommendation is to place greater emphasis on the publication of professional/education articles. As the American Bar Association aptly stated, one effect of an increasingly complex contracting environment is greater focus on the administrative aspects of the discipline. During the past thirty years, the acquisition and contracting community has struggled to establish itself as a unique discipline that contributes much more than administrative services. Professional articles emphasize "areas that improve or enhance

the position of purchasing personnel and the profession as a whole." (Williams, 1987) In doing so, they help to maintain past gains and keep the community focused on its quest for professional status.

A third recommendation is to direct more attention towards the publication of normative, or prescriptive, articles. Time-series analysis indicated there has been a steady decline in the share of the literature dedicated to innovation and improvement. The *National Contract Management Journal* is increasingly publishing articles that describe a particular process, regulation, or other similar focus.

This is an ominous trend for the acquisition and contracting community. It supports the American Bar Association's concern that imagination, judgement, and common sense are being overcome by mechanical complacency. Descriptive articles serve an important purpose in educating the workforce. Given the myriad of process-related problems, however, the premier publication in the acquisition and contracting field could direct more attention towards innovation and solutions.

A fourth recommendation coincides with one of Sweeney's recommendations:

...that more articles be supported by empirical research and analysis. Such analysis provides a sounder base than logic alone and the empirical basis also lends credibility to the author's assertions. (Sweeney, 1989, p. 55)

The researcher has already stated that he considered the overall share of the literature classified as empirical (15%), and the sharp decrease (almost 50%) in empirical articles during 1984-89, as surprising results. These results are especially surprising in light of the widespread use of computers, the proliferation of databases, the ease of using modern sampling and survey techniques, and the availability of Government procurement information under the Freedom of Information Act (FOIA). Authors should make greater use of existing resources to empirically support their research.

A fifth recommendation is to increase the range of subject matter discussed in the *National Contract Management Journal*. This is not a recommendation for a shift in emphasis in subject matter. Subject matter emphasis will be determined by the needs and concerns of the acquisition and contracting community.

What is recommended is a concerted effort to dedicate articles to a greater number of subjects. The summary analysis indicated 42 of the 69 subjects identified in the Body of Knowledge were the subject of fewer than five articles during the 24-year publication period. Publication of articles on these neglected subject areas could improve the knowledge of the workforce, and help to clarify the boundaries of the acquisition and contracting body of thought.

A sixth recommendation is for the National Contract Management Association to systematically reconsider its

description of the Body of Knowledge. There are several modules that were too narrowly defined for module-level classification. There were also several subjects emphasized in the literature that should have modules designated; notably, professionalism and procurement research.

A seventh recommendation is that the 13 unused taxonomical categories in Sweeney's Taxonomy not be deleted from the taxonomy. It is difficult to conceive of an article being placed in several of the unused categories; for example, the theoretical-normative-empirical-no particular logic category. However, given the system is necessarily reliant upon a researcher to make subjective category assignments, anything is possible.

An eighth recommendation is that the expanded taxonomy should be applied in future efforts to classify contracting literature. Application of either Sweeney's Taxonomy, or a subject matter classification system, to a body of literature will provide valuable information. To apply one system but not the other, given the ease of applying both systems via the expanded taxonomy, unnecessarily limits the potential of the research effort.

Finally, the results of future contracting literature classification efforts should be merged with the results of classifying the *National Contract Management Journal*. The result would be a larger database available for analysis. The information provided by such an analysis could lead to a

greater understanding of the acquisition and contracting field.

D. RESEARCH QUESTIONS

This section renders answers to the research questions posed in Chapter I. The primary research question this thesis sought to answer was:

- **What would be the results of classifying the literature presented in the *National Contract Management Journal* from Volume 1, Number 1 (early 1966) through Volume 23, Issue 2 (late 1989), and what patterns and trends in the literature could be discovered in an analysis of the results?**

Each one of the 413 articles published in the *National Contract Management Journal* from 1966 through 1989 were assigned to one of 36 taxonomical categories and one of 69 subject matter categories. This ultimately resulted in each article being assigned to one of 2,484 categories. Analysis of the results, presented in Chapters III and IV, identified specific patterns and trends in the literature.

Subsidiary research questions included:

- **To what extent does the application of Sweeney's Taxonomy to a large body of contracting literature sustain Sweeney's thesis conclusion that the taxonomy is an effective and useful system?**

This study reaffirmed Sweeney's thesis conclusion. Sweeney's Taxonomy is an easy classification system to apply to a body of contracting literature. It is an effective system

because it satisfies the objectives of an optimal classification system, and possesses the desired attributes of both the system and its categories.

It is a useful system because analysis of the results generated by the system provide relevant information about the literature. This information could not be provided by traditional subject matter classification systems. This information allowed the researcher to draw conclusions about the literature and induce conclusions about the acquisition and contracting field.

- **Does the application of Sweeney's Taxonomy to a large body of literature suggest how the system might be improved?**

Sweeney's Taxonomy was expanded at the outset of this research effort to permit classification by subject matter. Given the ease of applying the expanded taxonomy and the quality of its results, it is suggested that the expanded taxonomy be used in future classification efforts.

- **To what extent does a statistical analysis of the results of the classification of this literature provide information on where most contracting literature has focused?**

The results of this analysis, presented in Chapter III, precisely identified the focus of the literature.

The 413 articles classified fell into 23 taxonomical categories. Statistical analysis indicated a majority of the

articles classified were theoretical, positive, non-empirical, and based on either inductive or deductive logic.

Theoretical/conceptual articles accounted for 58 percent of the literature, and practical/managerial articles 40 percent. Only two percent of the articles were classified as professional/education. Positive (descriptive) articles comprised 59 percent of the literature, while 41 percent were classified as being normative (prescriptive). Only nine percent of the articles were supported with empirical evidence. An inductive or deductive approach was used in 64 percent of the articles.

Subject matter analysis indicated the literature covered most of the subject matter identified in the Body of Knowledge. However, a majority of the literature is dedicated to only a small part of the Body of Knowledge.

At the most general level of subject matter classification, contracts and procurement articles accounted for 61 percent of the literature, special topics articles accounted for 22 percent, and basic tools and functions articles accounted for 17 percent.

Within the basic tools and functions category, 60 percent of the articles emphasized accounting and finance, 29 percent emphasized commercial law, eight percent emphasized materials and operations subjects, and three percent emphasized economics. Within the special topics and considerations category, 88 percent emphasized special topics and 12 percent

emphasized special considerations. Within the contracts and procurement category, 30 percent were dedicated to management topics, 40 percent emphasized pre-award, and 30 percent emphasized post-award.

Based on criteria established by the researcher, the literature was focused on 14 of the 69 (20%) Body of Knowledge subject modules. These modules contained 64 percent of the articles published. There were 16 (23%) modules that had no articles assigned.

- **To what extent does a time-series analysis of the results of this classification indicate trends in the literature?**

The results of this analysis, presented in Chapter IV, identified specific trends in the literature.

One trend is that fewer articles were published in the *National Contract Management Journal* during the past six years. The number of articles published during the period 1984-89 (88), fell sharply from the previous period, 1978-83 (125).

Trends were apparent in the type of articles published. The share of the literature classified as either theoretical/conceptual or practical/managerial remained fairly constant during the past 24 years. A slight perturbation occurred during 1972-77, when six of the ten professional/education articles were published.

Other trends were identified based on analysis of the taxonomical categories. There was a steady decrease in the share of the literature classified as normative, from 45 percent during 1966-71, to 38 percent during 1984-89. The share of the literature classified as empirical has fluctuated. This category experienced a significant decrease from 19 percent during 1978-83, to 10 percent during 1984-89. Finally, there has been a substantial, steady decrease in the share of the literature demonstrating either an inductive or deductive approach. During 1966-1971, 75 percent of the literature demonstrated either an inductive or deductive approach. This share had fallen to 60 percent of the literature during 1984-89.

Subject matter trends were also identified in this study. The number and type of subject matter identified during different periods has varied. Based on criteria established by the researcher, there were six subjects emphasized during 1966-71, 11 during 1972-77, ten during 1978-83, and eight during 1984-89. This trend indicated a close relationship between the volume of articles published, and the number of subjects emphasized during a time period.

There was a tendency for four subjects to be consistently emphasized in the literature. A majority of the subjects emphasized were emphasized for a relatively short period of time (one or two six-year periods).

Finally, this study indicated there was a steady decrease in the share of the literature dedicated to the core of the Body of Knowledge. The share of articles emphasizing contracts and procurement subjects fell from 76 percent during 1966-71, to 49 percent during 1984-89. The share of the literature emphasizing tools and functions and special topics and considerations subjects increased by 15 percent and 12 percent, respectively.

- **To what extent does an analysis of the results of the classification of this literature provide information on the evolution of the acquisition and contracting field?**

This study suggested the acquisition and contracting field had become increasingly stable since the *National Contract Management Journal* began publication in 1966. This suggestion was primarily based on the sharp decrease in the number of articles published during 1984-89. The researcher attributed this decline to there being few major developments during this period. Compared to earlier time periods, 1984-89 was a relatively stable time period.

This study also suggested the field had become increasingly complex since 1966. This suggestion was primarily based on the steady increase in the share of the literature that was positive (descriptive). The researcher attributed this increase to the plethora of minor statutory and/or regulatory requirements promulgated in recent years.

Finally, this research indicated the acquisition and contracting field has developed around a precise core of subject areas. There have consistently been four subjects emphasized in the literature: the procurement process, cost and price analysis, contract types, and claims, disputes, and appeals. Fifteen other subjects have been emphasized less frequently, and numerous other topics have occasionally been the subject of an article.

- **What would be the results of compiling an annotated bibliography of the literature presented in the *National Contract Management Journal* from 1966 through 1989?**

Appendixes B, C, and D contain an annotated bibliography of all the articles published in the *National Contract Management Journal* from 1966 through 1989. In addition to presenting a summary of each article, the bibliography also contains a description of how each article was classified after applying the expanded taxonomy.

The bibliography can be used as a reference in the conduct of acquisition and contracting research. Additionally, the classification results presented in the bibliography can be merged together with results of future contracting literature classification efforts.

E. RECOMMENDATIONS FOR FURTHER RESEARCH

Application of the expanded taxonomy to 24 years of *National Contract Management Journal* articles provided useful

information about focal points and trends in the literature. Based on this information, the researcher induced conclusions about the entire body of contracting literature, and made inferences about the acquisition and contracting field.

However, the *National Contract Management Journal* is only one source of contracting literature. The expanded taxonomy should be applied to other sources such as *Contract Management* magazine. Analysis should indicate the degree to which other sources demonstrate patterns and trends similar to the *National Contract Management Journal*.

Additionally, the results of classifying other contracting publications should be merged with the results of this study. Analysis of the combined results would minimize the sole statistical influence of individual publications, and contribute to a greater understanding of the acquisition and contracting field.

F. SUMMARY

This chapter presented conclusions and recommendations based on analysis of the classification results. It also provided answers to the primary and subsidiary research questions. Finally, this chapter provided recommendations for further research.

APPENDIX A

This presentation of the National Contract Management Association (NCMA) Body of Knowledge was reproduced from the National Contract Management Journal Cumulative Subject, Author, and Title Index, a 1989 publication of the NCMA.

NCMA Body of Knowledge Contracts and Procurement

Basic Tools and Functions

Economics	Accounting & Finance	Materials & Operations	Commercial Law & UCC
Microeconomic Concepts 3	Cost Accounting Basics 5	Elements of Production 11	Elements of a Contract 17
Macroeconomic Concepts 3	Cost Accounting Standards 6	Elements of Industrial Marketing 12	Terms & Conditions 18
Industrial Organization 5	Elements of Business Finance 7	Elements of Logistics 13	Agency 19
Labor Economics 6	Financial Reports 8	Elements of Inventory Management 16	Warranties 20
	Break-Even Analysis 9	Surplus & Leased Property 11	Unconscionability 21
	Make or Buy Analysis 10	Materials Management 15	Breach & Remedies 22

Management

Procurement Organization & Management 23
The Procurement Process 24
Statutory & Regulatory Foundations 25
The Contracting Office 26

Special Topics and Considerations

Special Topics	Special Considerations
Budgeting for Procurement 28	Intereconomic Objectives 29
Systems Acquisition 30	Small & Minority Business Development 34
Program/Project Management 31	Vendor's Management System Audit 35
Productivity 32	Subcontracting & Subcontract Management 36
Assessment Procedures 33	Commercial & Industrial Products 37
	Considerations in AEP Contracting 38
	Small Purchases 39
	International Purchasing 40
	Government Property 41

Pre-Award

Acquisition Planning 27

Post-Award

Contract Administration 28

Requirements Determination 29	Solicitation Bid Awards 30	Financial Management of Contracts 31	Changes 32
Contract Types 33	Source Selection 34	Quality Assurance 35	Termination 36
General Contract Provisions 37	Source Development 38	Inspection Acceptance & Rejection 39	Claims Disputes & Appeals 40
Standards & Specifications 41	Negotiating Strategies 42	Monitoring Contract Performance 43	Contract Closeout 44
Patents & Data Rights 45	Cost & Price Analysis 46	Contract Auditing 47	Acquisition Management Information Systems 48

APPENDIX B

This appendix provides synopses of the articles published in the National Contract Management Journal from Volume 1, Number 1 (Spring 1966) through Volume 17, Issue 2 (Winter 1984). At the end of each synopsis is the corresponding category label. The corresponding National Contract Management Association Body of Knowledge module is bracketed ([]).

Volume 1, Spring 1966, Number 1

"Government Contract Warranties Under the ASPR," Russell J. Borden, pp. 1-26.

This article reviews developing case law and the new Armed Services Procurement Regulation (ASPR) 1-324, dealing with Government contract warranties. It is the purpose of this article to explore some of the problems of Government contract warranties and attempt to show what impact the new ASPR provisions will have in this area.

The author first discusses implied warranties with respect to which body of law, Federal or Commercial, applies to Government contracts. Next, he explores explicit warranties. He discusses policy considerations and the commercial and service warranty clauses specified in the ASPR.

A detailed discussion of a third warranty clause identified in the ASPR, the supply warranty clause, is presented. The author examines the extent of a contractor's liability, consequential damages, inapplicability of warranty, and rights and duties of the Government under this clause.

The author concludes the new ASPR provisions make clear a warranty clause gives the Government a contractual right to assert a claim for breach of warranty regarding deficiencies, notwithstanding other contractual provisions. He also concludes that while the provisions are not a panacea, they are at least a uniform approach.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[39]

"Termination Liability Under Incrementally-Funded Contracts," John D. Hall, pp. 27-49.

This article examines the contract language framework governing an incrementally-funded contract. It also attempts to define and quantify those factors that comprise the contractor's liability. It discusses the manner in which the contractor's total liability is computed, as well as the rights and obligations of the parties under an incrementally-funded contract.

The author first defines the basic terms. Next, he discusses the various contract clauses that describe the responsibilities of the parties regarding cost limitations and contract funding. In discussing the clauses, the author takes into account the factors upon which the use of a particular clause depends, such as whether the contract is fully funded or partially funded, whether it is a cost-type or fixed-price contract, and other factors.

Finally, the author identifies several deficiencies in the clauses and recommends specific revisions. Adaptation of the revisions should help clarify those areas which are unclear.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [36]

"Exports of U.S. Military Products and Services," Seymour Herman, pp. 61-71.

The purpose of this article is to provide guidance to U.S. defense contractors on exports of U.S. military products and services to foreign countries. The first topic addressed is the international traffic in arms. The author describes the licensing system administered by the State Department, and the regulations that identify and control the export of military products and services. He also discusses the roles of the Department of Commerce and the Treasury Department in controlling exports.

The second topic addressed is the legal and business aspects of the export of military products and services. The author examines the financial implications and tax implications of military sales, as well as considerations regarding patents and proprietary data. He also discusses the Act of State Doctrine and Sovereign Immunity.

The author suggests that in order to succeed in the military export business, it is important to establish strong ties with the offices of the Department of Defense and the State Department. It is also important to maintain an acute awareness of the problems, both legal and financial, associated in dealing with foreign countries.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [63]

"Management By Multiple Incentives," J.L. Howard, pp. 5-31.

The purpose of this article is to demonstrate how the management of defense procurement can be improved by the proper use of multiple incentive contracts. The author, while recognizing extra-contractual incentives, limits the functions of the incentive contract to the profit incentive; by doing so, its purpose can be understood and its effectiveness evaluated.

First, the author identifies the profit motive as the catalyst for the private enterprise system. Second, he reviews the history of incentive contracting in defense procurement. Third, he describes the disadvantages, advantages, and objectives of incentive contracting. Fourth, he provides a detailed description of the prerequisites to the use of a multiple incentive contract. Fifth, the author identifies nine pitfalls to avoid in the use of this contract type. Sixth, he identifies and analyzes ten basic principles of incentive contracting. Seventh, he describes a ten-step technique that can be used to conduct a thorough analysis of trade-off possibilities. Finally, the author concludes with a summary of his recommendations concerning the control of change orders, the making of trade-off analysis, and the general use of multiple incentive contracts.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[33]

"Impact of Negotiated Overhead Rate Clause on the Limitation of Cost Clause," Philip A. Weiner, pp. 32-46.

The purpose of this article is to address the conflict that arises from the interaction of the Limitation of Cost Clause and the Negotiated Overhead Rate Clause. The author begins with a description of each clause, their major purposes, and the requirements they impose upon the contractor.

Next, he identifies the area of conflict between the two clauses. The contractor is required to notify the contracting officer when he has exceeded, or is about to exceed, the estimated allowable costs set forth in the contract schedule. However, he can not determine what his allowable costs are until after overhead rates are negotiated. Conflict occurs when rate negotiations occur after contract performance is completed.

The author explores the impact of this conflict by examining the method by which overhead rates are determined.

Additionally, two scenarios are presented to illustrate the problem. An examination of case decisions is conducted to ascertain if the courts and boards give precedence to one clause over the other. Finally, the author presents his conclusions and recommendations, including modifications to the clauses.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [7]

"Risk, Incentive, and Profit in Government Contracting," William C. Ruotola, pp. 47-65.

The purpose of this article is to promote a better understanding and appreciation of the interdependence of risk, incentives, and profit. As the author suggests, the interactions of these three elements have proven to be a dynamic force in the improvement of the Government contracting system.

The author discusses each of the elements and how they are interdependent. Risk is discussed in terms of the risk-sharing borne by the parties to a contract. In his discussion of the incentive approach, the author makes the distinction between the cost-plus-incentive approach and the fixed-price-incentive approach. Three cases are analyzed to illustrate the utility and function of the incentive approach. He also discusses incentive management and the requirement for trade-off decision-making.

Profit is described as the basic motivating force of business in the free enterprise system. The author discusses the clustering of profit rates about a specific point per type of contract. He observes that the weighted guidelines approach has failed to eliminate this phenomenon. The author concludes that profits should be allowed to function as an active agent toward more efficient contract performance, not as the tail-end of a bartered agreement.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [7]

"Are There Statutory Fee Ceilings on Cost Plus Incentive Fee Contracts?" Harry A. Matthews, pp. 66-71.

The author examines U.S. Code (U.S.C.) and the Armed Services Procurement Regulation (ASPR) to determine if there are statutory fee ceilings on cost-plus-incentive-fee (CPIF) contracts. He contends there are no ceilings. Since fee is only limited under ASPR to that expressed in the statute, and since the statute does not impose a limit (except on a cost-plus-award-fee contract) -- the author reasons there is no

basis in law for imposing an arbitrary ceiling on cost-plus-incentive-fee contracts.

This article also discusses how the imposition of administrative ceilings is contrary to the basic philosophy of Government procurement. An example is presented to illustrate the inconsistency. The author suggests it would be in the best interest of Government and Industry to develop non-conflicting statutes and regulations regarding target cost and incentive fee arrangements for CPIF contracts.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [33]

"Impossibility of Performance Pro Tempore," Frederick W. Hess, pp. 72-88.

This article sets forth a new Doctrine entitled "Impossibility of Performance Pro Tempore." Under this doctrine, space age fixed-price impossibility can be analyzed without resorting to gaming contract theory (denies relief), "essence of equity" theory (only partial relief), or the adhesion contracts concept (rejected by the Armed Services Board of Contract Appeals (ASBCA)).

The author describes space age impossibility as an interim impossibility. This means performance is impossible today, but will probably not be tomorrow (due to rapid advances in scientific achievement). The author describes how the Doctrine arose from forging ahead in the space age -- using fixed-price contracts -- without adequate relief when space age impossibility occurred.

The author performed case analysis and concluded there existed no proper coherent approach to impossibility cases arising from space-age impossibility. The new Doctrine suggests an approach for deciding space age impossibility cases. Under the Doctrine, determinations will be based on whether enough time, money, and effort were provided to accomplish the contract requirements.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [22]

"Time Shared Computers -- A New Member of the Negotiation Team," R.D. Kane and H.H. Greenberg, pp. 89-93.

This article discusses a new dimension in contract management -- the use of time-shared computers. The benefits of using time-shared computers include: (1) immediate access to the result and effect of changes introduced during negotiations, and (2) pre-negotiation analysis of risk can be accomplished by simulating changes to the proposal or quotation.

The authors first discuss the basic time-sharing concept, including a comparison of batch-processing vs. time-sharing and the prerequisites for use of a time-sharing system. Next, specific examples and applications of the time-sharing concept are discussed.

PRACTICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE

[42]

"Mistakes in Government Contracts -- Error Detection Duty of Contracting Officers," Marshall J. Drake, Jr., pp. 94-116.

One purpose of this article is to expound on the general rules and statements of legal principles involving the error detection duty of contracting officers. A second purpose is to identify factors and circumstances that should alert the contracting officer to the possibility of error. The scope of this article is limited to cases involving a mistake by one party -- the bidder or contractor -- that is neither induced or shared by the Government, but for which some type of relief may be warranted. Cases involving mutual mistakes or circumstances in which the Government induces or contributes to the other party's error are not discussed.

The author describes the general rule in Government contract law regarding mistakes, and the three principles upon which it is founded. He provides a legal definition of "mistake" and identifies the most important factor -- when the error is alleged -- in mistake cases.

Detailed discussions are presented on the subjects of constructive notice, verification of errors, and relief available for mistakes. The author concludes that strict enforcement of error detection duty is justified, since the duty can be discharged completely (in most situations) by a simple request for verification.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [26]

Volume 1, Spring 1967, Number 3

"Role of the Auditor -- Some Thoughts on the Past, Present, and Future of the Defense Contract Audit Agency," John A. O'Hara, pp. 5-23.

This article discusses the role of the auditor (employed by either the General Accounting Office (GAO) or the Defense Contract Audit Agency (DCAA)) in defense contracting. The author examines this role by examining the past, observing the present, and forecasting the future.

The examination of the past role of the auditor commences with the Defense Contract Settlement Act of 1944. It represents the first major effort of the GAO to obtain a legal sanction for direct control over a broad area of negotiated procurement. This examination concludes with the formation of the DCAA in July, 1965, amidst a struggle between GAO and the Department of Defense (DoD) for control over defense procurement policy and negotiated procurement.

The observation of the present role of the auditor concentrates on the expanding roles of the auditor from GAO and DCAA. The author identifies specific shifts in audit activity.

Concerning the future, the author offer four predictions and three suggestions. He concludes that the balancing of authority and responsibility between the two competing audit agencies must be clearly specified.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [47]

"GAO's Right of Examination of Contractor's Records -- The Legislative History -- GAO's Interpretation -- A Court Decision," Robert F. Keller, pp. 24-31.

This article discusses the right of the General Accounting Office (GAO) to gain access to a contractor's books, documents, papers, and other records relating to the pricing and cost of performance of negotiated contracts. The author first discusses the legislative history of GAO examination rights. Public Law (P.L.) 921, under which GAO was first given a right to examine contractor's records under negotiated contracts in 1951, is discussed in detail. Four objectives of the GAO under the Access to Records clause are also discussed. Finally, the author discusses the case of **United States v. Hewlett-Packard Company**, litigation initiated by GAO upon refusal by Hewlett-Packard to comply with a GAO request for access to cost records.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [47]

"A Survey of Problems in Systems Development," Hudson B. Drake, pp. 32-54.

The high cost and long schedules associated with developing complex weapon systems make it mandatory that the technical feasibility, operational availability, and life cycle cost of a given system be determined before a commitment to its development and production. This method of determination is based on a systems analysis approach to national security.

This article traces the Department of Defense (DoD) instructions issued to implement this approach to weapon systems procurement. It begins with DoD Directive 3200.9, Project Definition Phase (PDP), issued in 1964. PDP was superseded in 1965 by DoD Directive 3200.9, Initiation of Engineering and Operational Systems Development. This article concentrates on DoD use DoD Directive 3200.9 to optimize use of national resources in the development of major weapon systems. The author discusses the distinctions between the DoD directive and a similar directive issued by the National Aeronautics and Space Administration (NASA). He then examines problems areas encountered by DoD in the pursuit of its objectives. Areas examined include the Request for Proposal (RFP), relative cost effectiveness evaluations, data rights, specifications and data, contract funding, and prime contractor/subcontractor relationships.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[24]

"The Competitive Aspects of the Research and Development Markets," William A. Parker, pp. 55-76.

This article sets forth a view of the national research and development (R&D) effort as a major market in which Industry competes for increasing R & D dollars.

The author first examines the expenditure growth for R & D by industrial concerns, universities and colleges, and the Federal Government. He then examines the national R & D effort by breaking it down into its segments: Basic Research, Applied Research, and Development. Next, he examines the growth of the national R & D effort from a historical perspective.

The author then turns to the competitive aspects of R & D. First, he examines competition for research dollars within the Government. Second, he examines competition among commercial firms for Federal research dollars. Third, he examines the National Aeronautics and Space Administration's (NASA) participation in the R & D market.

The author concludes that competition has been and always will be a part of the motivating force assisting national objectives -- its benefits outweigh its drawbacks.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[30]

"Engineering Study Contracts -- An Examination of Unique Contract Work Statement Considerations," Roger L. Wood, pp. 89-95.

The author suggests that revolutionary changes are being experienced in Government and Industry procurement practices. Many of the features of these changing disciplines can be applied to the smaller research and development (R & D) contracts. He urges placement of smaller R & D programs in proper perspective with the total sequence of procurement actions leading to an operational system.

This article identifies the Statement of Work (SOW) as the proper vehicle to integrate the R & D effort into a proper program perspective. This integration can be accomplished through a unique combination of technical and contractual writing of the SOW. Accordingly, it is the purpose of this article to examine the SOW as a contractual document that communicates the scope of work and the objectives of the program. It is presented in two parts. Part A. addresses problems faced in drafting work statements; Part B. addresses format and content considerations.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [41]

"The Cost Plus Award Fee Contract -- Its Uses and Abuses," Berwyn N. Fragner, pp. 96-108.

The cost-plus-award-fee (CPAF) contract is a form of incentive contracting increasingly being used by the Department of Defense (DoD) and the National Aeronautics and Space Administration (NASA). It is being used increasingly on development work to motivate the contractor to better performance. However, the CPAF contract can be abused, defeating its intended purpose.

The purpose of this article is to describe the characteristics of the CPAF contract, provide some guidelines to its negotiation and administration, and point out potential abuses.

The author describes the basic elements of the CPAF contract as a base fee, a maximum fee, a target cost, evaluation criteria, and an award fee formula. He also discusses evaluation periods, provisional fee payments and Evaluation Boards.

The author describes the administration of a CPAF contract as placing an unusual burden on both the Government and the contractor. Finally, he discusses several critical issues involving the evaluation process.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [33]

"A Primer on Government Contracting," Lloyd Zane Remick, pp. 110-136.

This article describes the various phases in the Government contracting process. Its purpose is to assist a potential contractor in securing a Government contract.

The author first discusses the pre-award stage. He suggests the potential contractor become acquainted with the various publications of the Government. Next, he advises the potential contractor how to get his name on a Bidder's Mailing List. The author then describes the details of the two primary methods of contracting: formal advertising and negotiations. He also discusses various aspects of the post-award stage, including the various functions of contract administration and remedies.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [24]

Volume 1, Fall 1967, Number 4

"Toward a Commission on Government Procurement," Chet Holifield, pp. 5-29.

This article discusses the need for a Commission on Government Procurement, as called for in H.R. 157, a bill introduced to Congress by the author on January 10, 1967. The author traces the bill from subcommittee to full committee, where it is being considered as H.R. 12510. He then presents a summary of the bill, including a list of 12 Congressional procurement objectives to promote economy, efficiency, and effectiveness in Government procurement.

The rationale behind the establishment of a Commission to review Government procurement is based on growth in Federal spending. Government spending has grown enormously and assumed much greater dimensions; new procurement techniques have evolved, and many new problems have emerged that deserve careful study. The author discusses many of the problem areas, including Truth in Negotiations, long-term contracting, procurement in regulated industries, set-asides, patents and innovations, Buy American, contracting out, and problems at random. He concludes with a discussion on learning from experience.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [24]

"The Novelties in Contracting With Non-Defense Agencies," Harry R. Van Cleeve, pp. 31-49.

This article contrasts procurement in defense agencies and non-defense agencies. First, the author presents a comparison of defense and civilian procurement law and regulations. This discussion includes a description of the broad authority granted to the General Services Administration (GSA) by the Federal Property and Administration Act of 1949, and limitations to and exceptions from that authority.

Second, the author contrasts the difference in contract administration between defense and civilian agencies. He also the various Boards of Contract Appeals.

Third, the author offers some observations on the relationship between civilian agencies and Industry. The relevancy of this relationship is important in view of increased spending by civilian agencies in support of the 1960's socio-economic programs.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [24]

"The Air Force Cost/Schedule Planning and Control System Specification: Experience and Outlook," A.E. Fitzgerald, pp. 51-58.

The Air Force Cost/Schedule Planning and Control System Specification is not a management system; rather, it is a set of criteria for evaluating a contractors' existing cost and schedule control systems. The basic idea behind the specification is that if a contractor operates a sound cost/schedule control system, expensive Government imposed control systems can be removed.

The author begins with a discussion of the review procedures of the specification. Next, he discusses the objections of contractors that the rigid, detailed reviews conducted by the Air Force are contrary to the Air Force policy of relaxing non-essential controls on contractors.

In support of tough reviews, the author cites the evidence of system reviews of 12 contractors. Only two contractors passed the initial review, three passed on subsequent reviews, and three others are making substantial progress. Four contractors have not started to correct their system deficiencies. The author discusses and categorizes the problems encountered in those reviews and describes an Air Force plan to encourage the four holdout contractors to correct their deficiencies.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE [43]

"Formalizing Risk in Incentive Contracting," Melvin W. Lifson, pp. 59-80.

The purpose to this article is to suggest a general approach for defining and quantifying risk in incentive contracting situations. The author first defines risk, in its application to incentive contracting, as meaning uncertainty over a range of possible outcomes (both above and below a specified target). Next, he reasons that since risk means uncertainty, the quantitative measurement and analysis of uncertainty and risk are equivalent. Therefore, the large body of available quantitative methods applicable to defining measuring and manipulating uncertainty can be similarly applied to risk.

The author applies this reasoning in developing an approach to formalizing risk. He provides a detailed explanation (with graphic illustrations) of the approach. He observes that this approach does not involve revolutionary changes in incentive contracting procedures. Three required modifications to current practices are discussed. Finally, a numerical example is presented to illustrate the use of the approach in structuring contractual change procedures.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [33]

"Rapid Evaluation of Multiple Incentive Contracts," A.W. Maddox, pp. 83-93.

The ability to rapidly assess the effect of various possible contract outcomes on the monetary rewards of multiple incentive contracts, can play an important part in the length of the negotiations and the quality of the final contract. This article demonstrates the development of the governing equations for a particular incentive contract, and the development and use of a specially designed circular slide rule that will aid in the rapid evaluation of this class of contract.

Consideration is given to variations in the number of events evaluated for performance, variations in the number of scheduled items for delivery and the different weights in the incentive result for three different milestones, and allowances for both overruns and underruns from the estimated cost.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [46]

"Subcontract Management," James M. Kerr and John F. Mihelich, pp. 95-104.

Subcontract management, as a part of the systems management concept, covers a wide range of functional responsibilities. It is the largest financial segment of the prime contract. Pulling together all aspects of subcontracted work is necessary in the management of complex system acquisition. This article describes the subcontract management effort of North American Aviation, Inc., in managing the Apollo program.

First, the authors describe the organization developed to place and administer the major and minor subcontracts. Second, they discuss the subcontract selection process -- the involvement of the subcontract management team in design activities and make or buy decisions, release of specification and data requirements, preparation and release of the bid list, determination of evaluation criteria, preparation of the Request for Proposal (RFP), the evaluation of proposals, and subcontract selections. Third, they address the negotiation process, advocating the team approach to definitizing the contract. Finally, the authors discuss management of the subcontract and the important function of Work Package Management.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[60]

Volume 2, Spring 1968, Number 1

"Truth (Or Consequences) in Negotiations," R.F. Mitchell, pp. 5-35.

Public Law (P.L.) 87-653, Truth in Negotiations, was enacted September 10, 1962. The Armed Services Procurement Regulation (ASPR) implementation of P.L. 87-653 requires a defense contractor to certify that cost or pricing data submitted to the contracting officer are accurate, complete, and current. Furthermore, it requires that all applicable contract and subcontracts contain a clause that allows for a reduction in price if it is found the contractor submitted deficient or defective data.

P.L. 87-653 and the implementing regulations were met by considerable Industry outcry. This article explores P.L. 87-653 and the questions it has raised. First, the author describes the background events which led to the law. Second, he examines a number of Armed Services Board of Contract Appeals (ASBCA) cases in which the ASPR clauses were considered. Third, he discusses the impact of Defense Procurement Circulars (SPC) 55 and 57. Finally, he concludes

with comment on the similarities and decisions of the examined cases.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[25]

"Actions By the Government in Lieu of Termination For Default," Paul C. Hill, pp. 37-61.

The Procurement Regulations provide specific guidelines for contracting officers contemplating a termination for default, as well as a specific method to accomplish termination. If the proper interests of the Government indicate that a termination for default should not take place, the regulations also provide for certain actions the contracting officer may take in lieu of termination.

This article examines three actions available in lieu of termination for default. First, the author examines permitting the contractor to continue performance under a revised delivery schedule. Second, he examines permitting the contractor to continue performance by means of a subcontract, or novation with a third party. Third, he examines executing a no-cost termination settlement when the contract requirement no longer exists. In examining these actions, the author reviews case law to draw conclusions about the action. Finally, the author discusses Air Force procedures in lieu of termination for default.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[36]

"The Contract Manager and Public Law 87-653," Robert R. Judson, pp. 63-81

The author observes the implementation of Public Law (P.L.) 87-653, Truth in Negotiations, enacted in 1962, introduced significant changes in regulations and actual practices. Interwoven with these changes are Armed Services Board of Contract Appeals (ASBCA) decisions, General Accounting Office (GAO) reviews, and Congressional interest -- factors which led the author to the conclusion that a commercial contract manager has a more important function to perform in complying with regulations and protecting his company's interests than he has had in the recent past.

The purpose of this article is to provide the commercial contracts manager with an operating guide for an increasingly complex Government contracting environment. He examines company policy, contract management responsibilities, Board decisions, and the submission of cost or pricing data that is certifiably accurate, complete, and current. Set-offs, cause and effect, and the author's conclusions are discussed. Tables

summarizing applicable contract clauses and ASBCA defective pricing cases are also presented.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[42]

"Negotiation -- A Coming to Terms," John H. Mitchell, pp. 83-107.

This article examines the basic concept of negotiated procurement to suggest approaches leading to a better negotiation methodology, and a clearer understanding of its uses and limitations in Government procurement. First, the author describes the highly complex and technical environment in doing business with the Government in negotiated procurement. In doing so, he defines negotiation and examines the statutory and regulatory policies of the Government.

Second, he describes an across-the-table negotiation methodology in two-steps. In the first step, Preparation for Negotiation, the author urges negotiators to know their company and know their customer. He discusses the material-data-information with which the negotiator must work to determine his negotiation strategy, tactics, and limitations. The negotiating team is also discussed. In the second step, Strategy and Tactics in Negotiation, the author describes various techniques for use in primarily adversary-type negotiations.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[42]

"Management Systems in the Procurement Process," William H. Thybony, pp. 109-123.

This article describes management systems, as related to weapon systems acquisition, as the systematic gathering of tremendous amounts of pertinent information for use by management in control and decision-making processes. The purpose of this article is to explore the accelerated use of management systems in the Department of Defense (DoD), and their impact on the acquisition process.

The author first examines the Armed Services Procurement Regulation (ASPR) Committee, and the Council of Defense and Space Industry Associations (CODSIA); these bodies can influence the application on management system to the acquisition process. Second, he discusses the evolution/revolution in management systems and the proliferation of diverse, and often incompatible, systems in DoD acquisitions. This led to Industry and DoD efforts to control proliferation. The DOD-CODSIA Advisory Committee for

Management Systems Control and its control plan is also discussed.

Third, the author discusses specific management systems, including the Selected Acquisitions Information and Management Systems (SAIMS) Project. Finally, the author discusses recommendations to solve or minimize management system problems and presents his conclusions.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [48]

"Cost-Plus-Percentage-of-Cost-Contracting," William D. Mack, pp. 125-138.

This article presents an overview of the contractual and legal restrictions on cost-plus-percentage-of-cost (CPPC) contracting. Its purpose is to enable contract managers to avoid or resolve problems that may be encountered with CPPC contracts and subcontracts.

The author begins by defining this form of contracting. He then discusses its use prior to World War II, when Congress specifically prohibited the CPPC system of contracting. Next, he describes the statutory and regulatory prohibitions against use of the CPPC system of contracting, and its application to prime contracts and subcontracts. The author then discusses various types of contractual arrangements that potentially involve the CPPC system of contracting. He examines different circumstances that must be carefully evaluated to determine if a contract is employing the CPPC system.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [33]

"Rights in Technical Data," Theodore M. Kostos and Stanley Dubroff, pp. 139-151.

This article seeks to demonstrate that with careful attention to, and understanding of a few basic principles and concepts, the new Department of Defense (DoD) data policy can be used smoothly and efficiently -- without a controversial confrontation between the Government and the private developer.

The authors discuss old DoD data policy and the conditions present at the time the new policy was developed. They then define key definitions and concepts regarding technical data. The authors then turn their attention to occasions when controversy will probably arise. They also discuss use of restrictive legends, predetermination of data rights, limited data rights, remedies of the data owner, remedies against the

Government, and remedies in the General Accounting Office (GAO).

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [45]

Volume 2, Spring 1968, Number 2

"Government Contract Disputes and Judicial Remedies -- An Overview," Louis Spector, pp. 7-21.

This article characterizes the administrative disputes process and the availability of judicial review as being "quite a mess." The author suggests this mess exists because the contract disputes process developed from a false premise: that the contract dispute procedures are precisely parallel to those of the regulatory, rate-making agencies under the Administrative Procedure Act. He observes that, on the contrary, the contract disputes procedures are part of the mission of each contracting agency, and that they should be so structured and managed.

The author's central point in this article is that the reasons for the disputes procedure are not related to the employment of administrative law concepts, or to the concept of finality upon judicial review inherent in those concepts. In presenting his argument, the author first provides a philosophical background and historical review of dispute procedures, including the impact of the **Wunderlich**, **Bianchi**, **Utah**, and **Grace** decisions. Next, he examines if the analogy between contract disputes procedures and Administrative Procedure Act procedures is valid. Finally, he reviews the reasons for disputes procedures.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [40]

"The Wunderlich Act versus the Non-Appealable Award Fee Determination," Joseph L. Colin, pp. 23-27.

Cost-plus-award-fee (CPAF) contracts typically contain a provision that makes award fee determination a unilateral decision by the Government official binding on both parties. The decision not subject to the Disputes clause of the contract. This article is an examination of the law on the finality of these decisions.

The author reviews the Wunderlich Act, which prohibits insertion into Government contracts provisions making the decisions of Government officers final on questions of law arising under such contracts. This being the case, the author

concludes the CPAF contract provision is therefore a nullity and of no legal force.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [37]

"The Relationship of the 'Nature of Work' and the 'Type of Contract'," Joseph L. Hood, pp. 29-47.

The purpose of this article is to examine the subject relationship through analysis, thus facilitating a more conscious understanding of the processes involved in effective contracting. First, the two terms, "type of contract" and "nature of work" are analyzed. "Type of contract" is examined from three viewpoints; "nature work" is examined in terms of internal and external factors.

Next, the relationship itself is analyzed from two points; the nature of the relationship, and the administrative process in which the relationship is based. A discussion is then presented that confirms the operation of the relationship, notwithstanding apparent over-reactions by either the Government or the contractor group. The author concludes with a comment about the constructive response to the situation.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [33]

"Applicability of Estoppel and Apparent Authority to Government Contracting," Jack Paul, pp. 51-65.

In commercial or private transactions, the unwary may be afforded some protection when relying upon directives or inaction by others. This protection is based on the doctrines of estoppel and apparent authority. However, the applicability of estoppel and apparent authority to claims of prime contractor against the Government is restrictive. The purpose of this article is to examine the nature of the doctrines of estoppel and apparent authority, and to evaluate the general rule that the Government is not obligated under either doctrine to determine whether there are exceptions to the general rule.

The author first defines each term and discusses the mutuality of contracting in both private (commercial) transactions and in Federal procurement. He then examines situations requiring real authority and evaluates if the Government is bound by real authority. Finally, he considers the applicability of the concept of "waiver," which is more broadly applied against the Government than estoppel.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE [17]

"Procurement Data Management," Paul R. Durr, pp. 67-90.

Procurement decisions that are based on many technical factors control the method of hardware procurement. The methods of procurement directly control the need for and use of data in procurement actions. This is the philosophy proposed for Air Force management of procurement data.

This article is a review of some recent studies performed, by and for the Air Force, to improve procurement data management. It also reviews major improvements being proposed. It is the author's intent to project the reasoning behind the proposed improvements.

The author describes the activities of various study groups. He also describes the major documents developed and proposed: an Air Force regulation, a manual of policy and procedures, an Air Force military standard for determining procurement data packages, and several data items. Other topics discussed include procurement data control, procurement method coding, procurement data packages, manufacturing and verifying information, data rights, and quality assurance. The author concludes with a detailed summary detailing what future data requirements may be needed for hardware to be acquired.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [23]

"Federal Government Contracting: The Legal Debate Regarding NASA Service Contracts," James M. Hollis, pp. 91-115.

This article is an exploratory analysis of the legality of certain Federal support service contracts. The analysis is based on research of written data, observations from direct participation in Government procurement and contracting, and interviews with individuals currently involved in the legal debate of this issue.

First, the author presents a view of the growth and development of the Government by contracting out. He observes contracting out has been the subject of controversy for many years. He discusses the merits and faults of the practice. Next, he discusses the major events affecting contracting out and the legality of the practice. He observes that the main thrust of Civil Service Commission (CSC) rulings is that the legitimate way to obtain such services by contract is to pervert the civil service system.

The author also discusses a specific type of contract challenged by the CSC, Congressional hearings on the issue, and a specific court case. Finally, he examines the current status of the issue and presents his conclusion.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [67]

"The Armed Services Procurement Act of 1947 Should Be Reformed," Robert B. Hall, p. 1-23.

The author observes that formally advertised procurement pervades the whole structure of the Armed Services Procurement Act of 1947; it is, in fact, the only procurement method formally recognized in the Act. He further observes that while formal advertising is efficient in the procurement of low-technology standard items, it has little or no relevance for acquiring complex products.

The purpose of this article is to propose certain major reforms to the Act. The objective is to have a viable statute that recognizes and deals with prevailing conditions. This article first points out the widespread impact of this important Act on Government procurement. Next, a history of the Act is described to help explain how its relevancy has diminished. The author then discusses recommended reforms. Finally, methods of implementing the reforms are presented.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [25]

"The Analysis of Direct Labor Costs for Production Program Stretchouts," Gordon J. Johnson, pp. 25-39.

Financial or technical difficulties can result in the stretchout of an established production program, creating difficult pricing and negotiation problems for the contracting officer and contract administrator. The difficulty is compounded by the lack of accepted analytical or estimating techniques for determining the effects of changes in production rates on direct labor requirements.

This article describes an approach to solving this problem. It involves a three-dimensional direct labor cost model that has been used successfully in pricing and negotiating a multimillion dollar stretchout of a major Air Force production program. The author first discusses various approaches to stretchout analysis. Next, he describes in detail the Three-Dimensional Model and how it incorporates both the rate effect and the learning effect. The model is presented in both graphic and equation form. Actual tests of the model, considered successful, are also discussed. Finally, the author presents a critique of the model.

PRACTICAL, NORMATIVE, EMPIRICAL, INDUCTIVE [46]

"The Ascendence of Status Over Contract in Government Contracting," Jerry Cohen, pp. 43-68.

This article attempts to isolate the cause of apparent frustration with the Government contracting process as a case of misplaced expectations. Disappointment occurs because participants in the process assume ascendancy of contract over status relationships -- when in reality the opposite prevails.

The author conducts his argument as a classical experiment. First, he states his hypothesis as the ascendancy of status over Contract. Second, he defines the terms of the hypothesis. Third, he tests his hypothesis by examining contract characteristics, the Government contract, the contracting parties, the uses and abuses of the Government contract, the non-uses of the Government contract, and the legal redemption of Government contract rights. Fourth, he corroborates the hypothesis by examining public opinion and national trends. Finally, he discusses the implications of his conclusions that the Government Contracting process is status ascendant.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE

[24]

"The Progressive Loss of Administrative Responsibility by the Contract Management Profession," John J. Cronin, III, pp. 69-74.

This article discusses an uninterrupted trend in defense procurement towards and increasing withdrawal of contract administrators from the administration of contracts. The trend is evident in the large number of fragmented management functions now present in firms performing defense contracts. The practitioners of these functions are infringing on the authority of the contract administrator.

The author suggests this trend may have originated during the McNamara era of the early 1960's when the Department of Defense (DoD) began requiring system management techniques. The author discusses the ascendancy of program management concurrent with the decline of contract management; he predicts that if this trend continues, the inevitable result will be the severing of the once close relationship between program managers and contract administrators.

The author recommends a two-prong offensive by the contract management profession to reverse this trend. First, contract administrators must exercise their legitimate authority more aggressively. Second, the academic members of the profession should develop a comprehensive theory of contract administration.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[24]

"Towards a Standard Industry Form for Fixed-Price Purchase Orders Under Government Contracts," Irving York, pp. 75-113.

The objective of this paper is to arrive at a set of provisions that would create the nucleus of a standard fixed-price purchase order form. Such a form would help minimize the variety of clauses, languages, captions, type, and structure. The standard form may not have universal application; however, it would form a baseline configuration. Variations from this baseline would be effected by supplement to the standard form.

The author's technique for creating the standard form is presented in two parts. The objective of the first part is to show what Industry is actually using. Composite clauses were culled from a representative group of Industry forms. This part is comprised of an integrated compilation of provisions under typical clause headings.

The second part contains a suggested form based on the provisions in the forms of the representative group. However, it is modified where other considerations seemed important. The author includes a cross-reference index of the two parts.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [37]

"Incentive Contracting," Lawrence V. DuLude, pp. 115-150.

The purpose of this article is to present a basic outline of the various types of incentive contracts currently being employed by the Federal Government. The author begins with a brief discussion of profit as the basic motivating force behind incentive contracts. He then traces the history of incentive contracting, beginning with an Army incentive contract for a Wright Brothers flying machine in 1908.

The author then discusses the fundamentals of incentive contracting, and the types of incentive contracts currently being used by the Federal Government. Graphs and examples are used extensively in this article. The author concludes with a discussion of the advantages of incentive contracting and offers his prognosis for the future of incentive contracting in Government procurement.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [33]

"The Service Contract Act of 1965," R.C. Doiron, pp. 151-166.

This article discusses the Service Contract Act of 1965 (SCA). The SCA arose out of a need for Federal protection of one of the most disadvantaged group of American workers. Many of the employees performing work on Federal service contracts were poorly paid. In many instances they were not covered by the Fair Labor Standards Act or State minimum wage laws.

This article explores the legislative history and regulatory requirements of the SCA. The author also discusses the application of the SCA to current procurement programs and its impact on the service industries. A summary of interpretative opinions by the Administrators, Wage and Hour and Public Contracts Division, is also presented.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [67]

Volume 3, Fall 1969, Number 2

"Cost Estimate Growth in Air Force Weapon System Acquisition," R. J. Lorette, pp. 1-15.

The purpose of this article is to examine the major causes for the growth of cost estimates in five current Air Force weapon systems. Prior to presenting his research study, the author defines "cost estimate growth," discusses some historical examples from Government procurement, and includes various opinions as to the causes of cost estimate growth.

The research study investigated the types of revisions in cost estimates and their order of significance in dollars. This resulted in a coding scheme for Change Justifications. The author then selected five weapon systems (AGM-69A, C-5A, C-141A, F-111A (TFX), and RF-4C) for cost estimate growth. Gross cost estimate information is presented and compared with initial cost estimate information to assess cost estimate growth. An analysis of the research results is presented.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE [46]

"CPE and Its Uses: A Dissertation," John A. O'Leary, pp. 17-33.

The purpose of this article is to review what is being done in some parts of Government and Industry in evaluating current and past performance of contractors and subcontractors; recent expansions of the Department of Defense (DoD) and National Aeronautics and Space Administration (NASA)

Contractor Performance Evaluation (CPE) Programs; and observations on where Government and Industry appear to be headed in this area.

The author first discusses the determination of a need for CPE and the establishment of the DoD CPE Program. Discussion of the purpose, processes, and uses of CPE follows. Other contractor performance evaluation systems are also described. Next, the author describes efforts to improve and expand CPE. A detailed discussion of the follow-on DoD CPE Expansion Program and the associated forms, records and databases is included.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [43]

"The Doctrine of Constructive Change," Robert L. Schibel, pp. 35-54.

The Doctrine of Constructive Change is now recognized by the Contract Appeals Boards, the Court of Claims, Government procurement agencies, and contractors. The author asserts that the Doctrine is absolute unto itself; it is through this Doctrine that Government contractual inadequacies are remedied.

The author surveys the Doctrine by first posing, then answering, a series of seven questions. An example of one question is whether the Doctrine comes under contract principles, agency principles, or both. A second example asks what types of changes are governed by the Doctrine, as well as what the effects are of determining which specific type of change is applicable. The author concludes with a summary and his recommendations.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [32]

"Some Thoughts on Estimating," Barney M. Versel, pp. 55-59.

The author observes that estimating necessarily involves a human factor; therefore, all estimates are conditioned by extraneous factors impacting the estimator's judgement. This is but one of several reasons why estimates are not intended to be exact.

This article identifies and discusses several reasons why estimating is inherently inexact. One reason is that the professional estimator does not control the estimate; a second reason is fear of underestimating; a third is lack of faith in the estimates made by the next lower level.

The author uses examples to illustrate what can complicate the estimating process. He concludes by summarizing his

thoughts on the process, including suggestions to lessen the negative impact of the human factor.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

"Monitoring Technical Progress in Research and Development Contracts," Richard A. Treselic and Louis M. Carrese, pp. 61-73.

This article discusses the monitoring process necessary in the performance of research and development (R & D) contracts. The authors introduce the subject of monitoring by discussing variations in monitoring fixed-price contracts. Next, they describe the contract management function and specific means applicable to its effective administration.

The authors then direct their attention to the specifics of monitoring R & D contracts. Four measures of research progress are identified: fidelity, quality, rate of performance, and prospectiveness. They describe how monitoring can be approached on a continuous or intermittent basis, and with lesser or greater concern for formal techniques. Techniques for reporting and observing are also described. The authors conclude with an overview on monitoring, reporting, and observing.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [43]

"Administrative Remedies," Paul J. Jacobson, pp. 75-80.

Generally, it is in the best interest of the Government and the contractor that differences existing under a contract be resolved without resorting to administrative remedies. However, resolution of differences by compromise or negotiation is not always possible. Under such an impasse, contract dispute provisions allows the contractor to pursue administrative remedies for settling the issue in conflict. This article presents remedies available to the contractor. They are based on the Armed Services Procurement Regulation (ASPR) Standard Disputes Clause, and the regulations of the General Accounting Office (GAO).

The major sections delineate the actions and responsibilities required of the contracting officer, the Contract Board of Appeals, and the Comptroller General, to provide forums before which the contractor can plead his case and be assured of impartial treatment.

PRACTICAL, POSITIVE, NONE-EMPIRICAL, NO PARTICULAR LOGIC[40]

"The Production Approach to Systems Acquisition," Conroy B. Johnson, pp. 81-87.

The author observes that design engineers working on commercial products are cost conscious; however, emphasis in this area is generally lacking in the development of defense systems. To remedy this situation, the author considers it essential that the design and development effort of weapon systems include, as a primary objective, the requirement to engineer systems so that ultimate production costs fall within a reasonable range of the budgetary estimate. This will require a change in the Department of Defense (DoD) approach to systems acquisition.

In this article the author sets forth a possible procurement approach, called "The Production Approach to Systems Acquisition," designed to emphasize the more important parts of the systems acquisition process. He describes the features of this approach and lists specific procedures to follow. The approach advocates use of a cost-type contract for design and development, and a fixed-type contract for production. An example is presented to illustrate the approach.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [50]

"The GAO Role in the Business Decisions Process of Defense Procurement: What Should It Be?" Robert B. Hall and Timothy D. Desmond, pp. 89-100.

The authors, employees of the General Accounting Office (GAO), discuss some of the issues involving the role of the GAO in the procurement process. The discussions are based on their personal points of view and experiences within the Legislative Branch.

First, they discuss the charter and staff capability of the GAO. Next, they discuss the role of the GAO in the decision process, distinguishing between outside-initiated reviews and self-initiated reviews. They observe that the current role of the GAO is extending into other areas, including the review of major weapon systems. A description of their reporting requirements is also mentioned.

Finally, the authors present a case to illustrate GAO involvement in the business decision process. The case addresses the question of competition; the authors discuss its possible effect on other major Government procurement problems. They conclude by examining current trends and possible new directions for the GAO.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [24]

"Cost Estimate Pressures Influencing the Air Force SPO Director in His Decision-Making Role," Richard J. Lorette, pp. 1-29.

The purpose of this article is to investigate and define the relationship between cost estimate growth and pressures on the System Program Officer (SPO). The author's methodology consisted of two parts. The first part was a generalized process model formulated from background reading relating to the purpose. The second part consisted of a 16 question interview administered to 18 SPO Directors and 13 Deputy Directors.

The author then discusses examples of cost estimation growth in the weapons acquisition process, the charter from which the SPO Director derives his authority and mission, and the dilemma of the SPO Director as he strives to meet his responsibilities under that charter. Further discussions address the impact of the Program Change Request (PCR), pressure on the SPO Director, and development of a system simulation model of the cost growth pressures within the weapons acquisition process. A short summary and recommendations conclude this article.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE [51]

"Government Contract Warranties: Isn't the Caveat Venditor Rather than Emptor?" Paul E. Payne, pp. 31-60.

This article is a wide-ranging discussion of an increasing call for warranties in procurement contracts. The author introduces the subject by questioning if the Department of Defense (DoD) considers itself a part of U.S. consumerism -- and therefore believes military procurement is subject to the same laws that protect the consumer from inferior products.

The author provides a background discussion of the emergence of DoD warranty policy. He observes 1964 was the first year the Armed Services Procurement Regulation (ASPR) contained comprehensive instructions on the use of warranties. He also compares Government and commercial warranties, discusses the product liability and damages problem, and compares commercial and military products liability. A discussion of consequential damages concludes this article.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [39]

"Incentive Earnings and Payments During Performance of CPIF Contracts," John H. Love, pp. 61-87.

This article is a legal analysis of the clauses, regulations, and statutes underlying incentive earnings. The author suggests that current incentive contracting forms have created unique business management problems regarding contractor incentive earnings. He believes these problems are caused by inconsistent and ambiguous legal provisions, associated procurement regulations, and at least one associated statute that has not been sufficiently adapted to incentive contracts.

In order to evaluate this inadequacy, the author first analyzes the fundamental purposes underlying incentive earnings. Second, he applies legal principles involving interpretation, liquidated damages, just compensation, and equitable estoppel in terms of justifying alterations to the various provisions. His conclusions and recommendations are also presented.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [33]

"DPC NO. 74 -- New Standards for Responsive Subcontractor Cost or Pricing Data," Henry N. Titzler, pp. 89-99.

This article examines Defense Procurement Circular (DPC) No. 74 which sets forth new standards as to what will be considered responsive subcontractor cost or pricing data in prime contractor proposals. DPC No. 74 is based on a policy decision, not a legal decision; it is a continuation of the spirit of Public Law (PL) 87-653, Defective Pricing.

The new standards apply to subcontractor proposals of \$1 million or more, or \$100,000 and ten percent of the prime contract. However, any subcontractor who is awarded a subcontract for more than \$100,000 must comply with the DPC requirements. The author uses figures to illustrate the requirements before and after the implementation of DPC No. 74. The author discusses the effect of price competition, the general applicability of DPC No. 74 before and after prime contract award, methods of presenting subcontractor data in prime contractor proposals, excusable deviations, and price adjustments for defective data.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [60]

"Planning and Control Management Perspective," S.F. Haugh, pp. 101-118.

This article describes a technique to interrelate three basic elements present in every estimate: what, how, and who. This technique, called Three-Dimensional Matrix (TDM), results in easy to follow cost breakdown that can be directly applied to schedule/cost requirements. It also produces a work breakdown structure (WBS).

The author discusses attempts by the Government to impose management control systems, such as PEP and PERT, on Government contractors. He notes that some good ideas were proposed; however, they were often difficult to implement. The TDM system is proposed as a simplified system that is relatively easy to implement.

The author describes the three axis in the TDM system as: (1) the basic customer requirements axis, (2) the product or hardware axis, and (3) the resource/function axis. A discussion of how to use the TDM system and its apparent advantages is also presented.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[27]

"The Application of the ASPR XV Cost Principles to Contract Negotiations," W.J. Platzer, pp. 119-132.

The Armed Services Procurement Regulation (ASPR) Section XV, Contract Cost Principles, effective March 1, 1949, provided a common set of cost principles applicable to cost-type contracts. In a subsequent 1960 revision, new cost principles were issued. However, they still were not to be incorporated directly or by reference into any fixed-price contracts. They were to be used only as a "guide" in negotiating fixed-price contracts.

This article examines the confusion that has surrounded this "guide" concept. Confusion has arisen because various audit agencies have been advising contracting officers to apply these principles without regard to contract type.

The author discusses the history of the ASPR cost principles and their application. He observes that contradictory positions have been taken by Industry and Government on their proposed applicability to fixed-price contracts. He then analyzes these positions from several aspects. His discussion then focuses on the impact of ASPR 15.205 on profit and fixed-price contracting.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[25]

"Contractor All Risk Incentive Contract (CARIC)," Barney M. Versel, pp. 133-143.

The Contractor All Risk Incentive Contract (CARIC) is proposed as an incentive contract that will accomplish the following objectives: (1) compliance with contractual requirements, (2) maximum performance at the lowest price for the buyer, and (3) maximum profit for the seller.

The author first examines the philosophy behind the incentive contract. He suggests that current incentive contracting techniques result in unbalanced contracts because of inherent limitations involved in the interaction between the cost incentive share lines, the target cost, and the target profit/fee. He discusses three major innovations introduced into incentive contracting by the CARIC. He describes eight elements subject to negotiation in a CARIC contract. An example of a hypothetical CARIC negotiation is also presented.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [37]

Volume 4, Fall 1970, Number 2

"Recent Efforts by the AEC to Improve its Procurement Process," James T. Ramey and Joseph L. Smith, pp. 145-159.

The Atomic Energy Commission (AEC) came into being on January 1, 1947, inheriting the Manhattan Engineering Division (MED) of the U.S. Corps of Engineers. The AEC inherited not only the plants and labs of the MED but also a method of production: contractor operated facilities under standard cost-type contracts called "management contracts."

This article discusses how the AEC continued to operate under this procedure until, as the AEC's program became more complex and diversified, change was necessary. The author describes the post-World War II environment, the AEC "administrative contract" and its similarity to the usual cost-plus-fixed-fee (CPFF) contract, and the growing inflexibility of the procurement process.

Emphasis then shifts to AEC actions to improve the process. In 1967 a Contractor Procurement Study Group was formed with a charter to examine and revitalize the process. This article discusses four specific recommendations of the Study Group, contractor home office support, and the AEC's perspective on procurement flexibility.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [24]

**"Organizational Conflict of Interest: A Study of Perspective,"
Matthew J. Travers, pp. 161-177.**

The author suggests the U.S. is in an early stage of developing accepted procedures for the avoidance of potential conflicts of interest related to profit-making organizations in public sector research and development (R & D). This article considers organizational conflict of interest in Government R & D, since it is an area that is not fully understood.

The author first reviews the historical development of the concept of conflict of interest, and Government sponsorship of R & D. Particular emphasis is placed on statutory interpretation, recent legislation, and the Federal commitment to R & D.

A condition that arises is a requirement for business and Government to jointly administer the expenditure of public funds. This condition, in turn, creates a need to provide standards and criteria to guide public officials, private persons, and organizations in minimizing conflicts of interest. This article discusses the 1962 Bell Report, and Department of Defense (DoD) Directive 5500.10 which issued rules for the avoidance of organizational conflicts of interest. This article concludes with discussion of the notion of the modern state and a recommended method of enforcement.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE [54]

"The 20-20 Hindsight of Overhead Determination or Is This a Good Idea?" David M. Conrad, pp. 179-186.

This article examines current laws and regulations regarding allowable overhead costs. The emphasis of this article is whether prospective costing or retroactive costing is preferred.

The author first explores the Armed Services Procurement Regulation (ASPR) for guidance in determining allowability and allocability of costs. He then traces the historical preference for prospective overhead costing and concludes it was a relatively accurate, simple, and inexpensive method to administer.

He then discusses the impact of a 1956 Comptroller General (CG) decision that considered the prospective method unlawful and set forth requirements for retroactive determination of actual overhead costs. The author characterizes this process as resulting in "administrative chaos." The author concludes the CG decision is based on good law; however, it is bad business, and he suggests several possible solutions.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

"Data Warranty in Defense Contracts," Frank Reda, pp. 187-195.

This article examines data warranty, a relatively new and highly controversial subject in defense procurement. The author notes the Department of Defense (DoD) is considering a proposed Armed Services Procurement Regulation (ASPR) revision relating to the use of a data warranty clause.

The author first examines the reasons Industry has reacted so negatively to the introduction of data warranties in defense contracting. Next, he discusses why data warranties are so desirable by the DoD. Data reproducibility, technical assistance agreements, damages, and data from subcontractors are also discussed. The author concludes there are legitimate reasons for the Government to insist upon reasonable data warranty from the contractor.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [39]

"How To Succeed in Defense Business Without Really Trying," Barney M. Versel, pp. 197-203.

This article describes the business practices and organization of a fictional company. Its purpose is to contrast a firm's commercial business environment with its military business environment. Numerous topics and issues familiar to procurement professionals are touched upon, including customer control of production; detailed specifications; cost allowability and allocability; separate facilities, staffs and accounting systems; underbidding on contracts, or "buying-in;" and changes.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [24]

"Quality Programs for Technical Data," Floyd L. Dillingham and Stanley E. Wilson, pp. 205-215.

The purpose of this article is to determine how concerned Industry should be with increased Government interest in data quality. The authors note the quality of supporting data can be just as essential as the quality of system hardware; data forms the basis for many program decisions.

The authors studied the emerging Government requirements and surveyed data quality programs currently in effect in the aerospace Industry. Data obtained from their investigation and studies form the basis for a financial risk analysis. Based on their analysis, the authors offer recommendations for implementation of practical quality programs for technical data.

This article is arranged in sections that address specific objectives. The objectives are to determine: (1) how much emphasis the Government will ultimately place on data quality, (2) what will constitute an adequate quality program for data, (3) what are the cost and risk considerations, and (4) what course Industry should pursue.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [35]

"A Critique on Weapon Systems Management," S.S. Podnos, pp. 217-223.

Past and present General Accounting Office (GAO) examinations in the research and development (R & D) area have identified a need for improvement in development and procurement management of Department of Defense (DoD) weapon systems. This article describes and discusses the two basic causes of performance degradation: schedule slippage and cost growth.

The two basic causes are commonly referred to as (1) requirements determination and (2) concurrency. The author describes the concern of the Executive Branch and Congress with these problem areas. He then discusses the three phases of the development process: exploration, advanced development, and engineering development. The author then discusses the contract definition phase; it should not be entered until several criteria have been met.

The author then defines concurrency and discusses the risk inherent in concurrent development and production. The causes of cost growth, and the relationship of these causes and the two problems areas, is also a subject of discussion. The author concludes by noting the contributions of GAO in solving these problems.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [50]

"The Log-Normal Distribution in Decision Making: An Application to an Incentive Problem," George Schick and Richard Noorgard, pp. 225-234.

The log-normal distribution has wide applicability as a tool for evaluating business decisions. It has the added advantage of being considerably easier to understand, and less costly to use, than alternative techniques like PERT and Critical Path Method (CPM).

The purpose of this article is to demonstrate that the log-normal curve can be used effectively in financial decisions, show how the equations for fitting the distribution are derived, and apply the distribution to a decision

concerning an incentive contract. Finally, the log-normal distribution is compared to alternative techniques that could have been used to reach similar decisions.

PRACTICAL, NORMATIVE, EMPIRICAL, DEDUCTIVE

[33]

"Maximum Profit Incentives in the 1970's," George S. Schick and Dean F. Pace, pp. 235-243.

This article suggests that in the 1970's the Government will negotiate multiple incentives whereby a contractor may earn maximum profit -- for maximum performance at target cost, or target performance at minimum cost. The authors first describe the multiple incentives negotiated in the 1960's as being independent and additive. They then describe an independent incentive model. They conclude if one incentive was less than perfect, the total necessarily added to less than maximum profit.

Next, the authors describe a maximum profit model for use in the 1970's whereby maximum profit can be achieved for various combinations of cost performance. This concept allows the Government the opportunity to maintain current negotiated target profit percentages. It also offers the contractor an opportunity to earn higher final profits.

PRACTICAL, NORMATIVE, EMPIRICAL, DEDUCTIVE

[33]

"Federal Procurement: A Study of Some Pertinent Properties, Policies and Practices of a Group of Business Organizations," Raymond G. Hunt, Ira S. Rubin, and Franklyn A. Perry, Jr., pp. 245-299.

This article is a final report of a questionnaire survey of 27 industrial organizations. The purpose of the survey was to: (1) illuminate selected perceptions, policies, and procedures regarding Government contracting, (2) describe general business objectives and managerial methods, and (3) yield assessments of how the surveyed firms perceived their present and future business prospects. Special attention was accorded to policies and procedures relating to contractual incentives and their role in program planning and performance.

The authors used two questionnaires. The first was an individual questionnaire; it represented the respondents personal point of view. The second was an official questionnaire responded to on behalf of the organization. A detailed discussion of the general results is presented, followed by a summary and conclusion.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[24]

"Contract Disputes and Remedies: Are Current Procedures for Redress of a Contract Grievance Against the Government Fair and Efficient?" Louis Spector, pp. 1-11.

This article is a broad approach to the subject of "disputes and remedies." The author addresses the title question by presentation of a historical perspective of American disputes and remedies doctrine. The "sovereign immunity" doctrine ("The King Can Do No Wrong") was struck down in 1862 with the passage of the Tucker Act. The Tucker Act permitted the U.S. to be sued on its contracts.

The thrust of this article suggests sovereign immunity has been partially reintroduced and reimposed in the half-dozen years preceding this article. In support of his contention, the author points to the **Moorman** and **Wunderlich** cases, the Administrative Procedure Act of 1946, and the **Bianchi** case of 1963. These judicial and legislative actions indicate the constitutional due process guaranteed by the Tucker Act has been removed from the court. It has been replaced by administrative agency proceedings. The effect has been severe degradation of contractor rights and the imposition of form of sovereign immunity.

The author also discusses the two major purposes for the disputes process and how the judicial remedy has suffered. Several proposed cures are analyzed and discarded by the author. He suggests alternative solutions he believes would be successful.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [40]

"Whither Default Terminations?" James W. Booth, pp. 13-21.

This article discusses recent writings, decisions, and litigation that address the subject of default termination. First, the author comments on two articles that appeared in an American Bar Association newsletter. The first article suggests an alternative procedure for board or court review of a contracting officer's proposed default decision -- it proposes an objective administrative review. The second article questions the sense of deferring a default decision to a party who is a stranger to the contract. The author then

discusses several cases currently in litigation that may shed light on the duties of the contracting officer.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [36]

"Cost Allowance of Property Taxes," William J. Spriggs, pp. 23-30.

This article addresses the debate concerning the allowability of personal property taxes. The purpose of this article is to delineate the two sides of the debate; then determine if personal property taxes paid by a contractor on Government fixed-price contract inventions are properly allocable to and allowable under Government cost-reimbursement contracts. This debate has not yet been settled by a Board or Court.

The author first discusses the four tests of allowability. He then explains the Government auditor position against allowability of personal property taxes. Next, he restates the issue as a question of allocation vs. direct charging. Pertinent Court decisions on the concept of allocation are also reviewed. Discussions of the **Lockheed** case, ASPR XV 205.41(a)(v), and fixed-price contracts follow. The author concludes the contractor's position is the correct position.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [46]

"Formal Advertising versus Negotiations," J. Edward Welch, pp. 31-40.

The traditional view of the General Accounting Office (GAO) has been that formal advertising should be the preferred method of Government procurement. The purpose of this article is to argue the soundness of this view.

The author notes that GAO preference for the formal advertising method is based on their experience in auditing contracts and settling bid-protest cases. He identifies the elements of the formal advertising procedures, noting they are for the benefit and protection of the bidder as well as the Government (the Courts share this view).

His attention then turns to professional criticism of negotiated procurement. He believes negotiated procurement practices fall far short of the procedure described in the Armed Services Procurement Act, and the Armed Services Procurement Regulation (ASPR). A detailed discussion of serious deficiencies in the method is presented. The author concludes with a critical review of Hall's article "The Armed

Services Act of 1947 Should Be Reformed" (National Contract Management Journal, Spring 1979) in favor of negotiations.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[24]

"Choosing Between Research Project Grants and Contracts in Mission Agencies: As Simple as $A + B$ or $-A * -B$," John J. Grossbaum, pp. 41-53.

The paramount concern raised by Federal administrators charged with responsibility for supporting research projects seems to be when to use grants, and when to use contracts. Notwithstanding the lack of concern regarding the nature and attributes of the grant, or the legal relationship created by its use, the selection of the appropriate device for supporting a particular project poses a legitimate concern.

This article is presented in two parts. The first part examines the efforts of several Federal agencies to prescribe guidance for making grant or contract selections. The Selection Criteria issued by the Department of Health, Education, and Welfare (HEW) is examined in detail. Applying boolean algebra, the author demonstrates the HEW criteria are inherently illogical. The second part introduces real-world considerations to the selection decision-making process.

The author concludes Government administrators devote too much time and effort to the mechanics of supporting research. They should expend more energy accomplishing the missions the research is intended to serve.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[68]

"Needed: More Flexibility in Major Weapons R & D," Timothy D. Desmond, pp. 55-62.

This article advocates a shift from the traditional weapon system optimization approach (components are specifically designed) to a more flexible, economical approach emphasizing component and subsystem experimentation (no specific weapon system planned).

The author examines the rise of the major weapon system concept and the natural progression towards a systems optimization approach. He discusses the limitations of this approach, including the complexity of the systems engineering effort, validation through concurrency, and the "sunk-cost" effect of concurrency.

The author next examines the benefits of a flexible approach that encourages the support of exploratory and advanced R & D. With less emphasis on getting specific weapons systems started, the author believes there will be greater

technological advances over a broader front. He describes the potential benefits of this approach; he concludes it is the more prudent approach.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [68]

"Delayed Payment Under Contract Stretch-Out," Frank Reda, pp. 63-70.

Contract stretch-out is described as an extraordinary tactic used by the Government to counter reduced funding. A stretch-out generally entails no work; its purpose is to slow down contractor progress so funds allotted under an incrementally-funded contract will last for a longer period of time.

The author notes that novel contracting experiences lead to novel claims. No dispute arises over the principle that the contractor is entitled to a monetary adjustment for increased costs caused by the stretch-out. However, the novelty of the stretch-out has led to the novel claim that the contractor is entitled to the "value" of delayed payments.

This article examines the nature of the "value" of delayed payments. A hypothetical case is presented to spotlight the nature of the claim. In examining the nature of "value," the author suggests that the contractor is actually claiming interest. From a different perspective, he suggests that "value" is actually "profit."

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [40]

"Partitioning, Cost Sharing, and Competitive Bids: An Experiment," Richard G. Newman, pp. 71-85.

Use of competitive bidding focuses attention on the tools and techniques of risk minimization on both sides, as well as factors concerned primarily with physical product. As the degree of certainty or ability to assess the subjective probabilities of success and costs decrease, the orientation toward risk transference or minimization increases.

This article identifies three approaches that can be utilized to attempt to minimize risk: (1) cost-plus-fixed-fee contracts, (2) cost sharing, or incentive contracts, and (3) partitioning.

The author describes an experiment conducted with eighteen M.B.A. candidates to study the patterns of risk-taking versus risk-absorption under cost sharing and partitioning. In the experiment, six teams bid on five three-part research and development (R & D) contracts, with sharing rates ranging from 10% to 50% (based on a general formula described in the

article). Two solution approaches are discussed; one is based on a simple expected value model, the other is an application of LaPlace criterion. The experiment results and the author's conclusion are presented. There is also an appendix that describes a competitive bidding experiment.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[33]

"Pricing and Contracting for Inflation," Harold E. Sharp, pp. 87-107.

The intent of this article is not to expound on economic theories, or to predict what the future will be. Its purpose is to provide an overview of the methods used in pricing and contracting for inflation.

The author first discusses three general methods used to anticipate inflation. Before discussing any of the methods for dealing with inflation, the author considers the types and limitations of available data. The author then discusses how pricing for inflation is done statistically, by direct estimating, or a combination of the two. The author illustrates the pricing methods using labor rates.

The balance of this article is a discussion of the contractual arrangements that address contingency pricing for inflation, Armed Services Procurement Regulation (ASPR) policy and clause coverage, and Industry opinion of the clauses. The author concludes with some generalized recommendations.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[46]

"Commercial Application of Government Research and Development Output," Isidore J. Masse, pp. 109-122.

The purpose of this paper is threefold: first, to ascertain the extent to which spinoff from Government-sponsored research and development (R & D) affects measured productivity; second, to determine which industries benefit the most from spinoff; and, third, to determine whether large-size firms are favored in the distribution of Government R & D funds to the private sector.

Section I discusses the various types of spinoffs. The results of classifying military R & D projects as benefiting the consumer goods sector, the capital goods sector, or both; allowed the author to determine the effects of spinoff. Section II examines industries affected by spinoff. Part III examines the relationship between firm size and the receipt of Government R & D funds. It was based on a statistical analysis of the 400 firms listed in the 1960 Department of Defense

(DoD) list of major contractors. Section IV presents a summary and conclusion.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[68]

"The Management of Change: A Catchword or an Opportunity," James S. Reece, pp. 123-137.

This article discusses how "Management of Change" is a significant opportunity to effect major cost savings on an weapons program -- or any other dynamic development or production program.

The author first distinguishes between "cost growth" and "cost overrun." He then defines "contract changes" and categorizes them as "task" or "non-task" changes. Various programs that have recently experienced highly publicized cost growth (C-5A, F-111, Safeguard missile) are analyzed to demonstrate the significance of change growth as a component of total cost growth.

The balance of this article describes the author's doctoral research on the contract change phenomenon. He studied one major contractor weapons system program that had been impacted by contract changes (only "task" changes were considered). Interviews with other contractors' personnel, consultants, and Government officials were conducted to augment and validate his study.

As a result of his research effort, the author suggests improvements for cost management of the thousands of contract changes issued by the Department of Defense (DoD) each year.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[23]

"Orientation to State Contracting," Emil J. Relat, pp. 139-161.

Although this article concerns only the contract law of the State of California, it provides a valuable basis for comparing State contracting and Federal laws and regulations. The author's first topic of discussion is a comparison of Government contracts and private contracts. Court decisions are analyzed. The author concludes in most respects the Government is bound by the same rules and laws that apply to private parties.

The next topic discussed is the statutory basis governing the power of the State. A detailed discussion addressing certain concepts deserving attention in consummating State contracts is presented. Concepts addressed include Buy American requirements, the California Preference Law, the Alien Labor Law, the Subcontractors' Listing Law, Fair

Employment Practices, wage and bond requirements, and bids and awards policies. This article concludes with a brief description of the State Administrative Manual and the author's general observations.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [25]

Volume 5, Fall 1971, Number 2

"Judicial Review of Administrative Decisions Adverse to the Government," William J. Spriggs, pp. 1-14.

This article traces the pathway to resolution of a contractor's claim under the present standard Disputes clause for supply contracts. It also traces resolution under relevant statutes, emphasizing the right of the Government to have judicial review of unfavorable Board of Contract Appeals decisions made under the Disputes clause.

The author describes how the Disputes clause provides authority to the contracting officer and Boards of Contract Appeals in the resolution of contract disputes. He then discusses the **Wunderlich** case and the Administrative Disputes Act which followed. Several cases are discussed to demonstrate current attitudes of the Courts regarding the right of the Government to seek judicial review. Discussion of the General Accounting Office (GAO) and the Boards of Appeal are followed by the author's conclusions and advice.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [40]

"Weapon Systems Acquisition in the 1970's -- New Policy and Strategy," Ralph C. Nash, pp. 15-26.

At the beginning of the 1960's, the Secretary of Defense made significant policy changes in an effort to correct the weaknesses in an acquisition process under heavy criticism for promoting inefficiency. This article is presented in support of the author's belief that in the process of formulating these new policies, a critical analysis should be made of the policies of the 1960's. Specific analysis is directed towards the realism and implementation of these policies.

The theory behind the 1960's policies was that the services should thoroughly plan their development programs prior to commencing full-scale development; thereafter, they should undertake the development effort under firm contractual commitments from contractors. The author suggests this seemingly sound theory has failed and sets forth two sets of

causes for this failure -- basic misconception and failures of implementation.

The author then details seven fundamental premises upon which to base a new policy. He then proposes a new acquisition strategy embodying these premises. The new strategy contains concurrent streams of technology development that are interrelated.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [50]

"The Should Cost Method of Pricing Government Contracts," J.H. Stolarow, pp. 27-34.

The Should Cost Method (SCM) is an attempt to look at a contractor's operations and identify ways to reduce its production and operation costs. SCM is not a new concept. What is new is the team approach to a comprehensive evaluation of the contractor. The author lists areas that should be examined by a competent contractor evaluation team consisting of engineers, procurement specialists, statisticians, legal personnel, and accountants.

The author describes how the usual approach to pricing and administration is not as effective as it could be. This is due to problems of fragmentation of the effort between different activities, and a lack of sufficiently qualified Government personnel to perform this effort. The SCM is also an attempt to improve cooperation between Government and Industry, an absolute necessity in keeping the cost of weapon systems down. The author discusses various efforts undertaken to apply SCM by the different services. He concludes with a discussion of the role of the General Accounting Office (GAO) in the SCM environment.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

"The Return to Parallel Development," Conward E. Williams, pp. 35-51.

This article addresses a long-standing problem in defense procurement: the lack of sustained competition in the acquisition of major weapon systems. The usual approach has been to conduct a design or "paper competition" and thereafter to procure the system from the contractor on a sole-source basis. Once the initial development contractor has been selected, competition ceases.

This article discusses a strategy that would provide competition after the award of the initial development contract. Parallel Undocumented Development (PUD) is a method for enhancing competition in the procurement of weapon

systems. This article examines PUD as a procurement strategy. It also analyzes application of this strategy by the Air Force. The author describes the early use of PUD and two competitions that illustrate the benefits of prototype vs. paper competition. The emergence of the Government's reliance on sole-source strategy is also discussed.

The emphasis of the article then shifts to the specific application of PUD in the Air Force acquisition of the AX aircraft. The author concludes that the AX acquisition demonstrated PUD is an effective strategy for the acquisition of major weapon systems.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[50]

**"Extra-Contractual Influences in Government Contracting,"
Albert J. Cirone, Jr., pp. 53-66.**

This article is a detailed description of the results of a grant research effort conducted on behalf of the National Aeronautical and Space Administration (NASA). The primary objective of the research was to seek a basis for improving NASA procurement policies. To achieve their objective, the research team attempted to determine those extra-contractual influences that motivate contractors. They also evaluated the extent to which those influences can be used as supplemental guides for contract management and administration.

Research data was gathered by company questionnaire (27 companies), individual questionnaire (1,283 respondents - 845 from Industry, 438 from Government), and interview (244 management personnel - 138 from Industry, 106 from Government). The author presents ten research conclusions first, to aid in comprehending the data that follows. A sample of topics evaluated include reasons for entering Government markets, performance controls, company goals, and personal work goals. The general conclusion reached is there is a need to be constantly attentive to "extra-contractual influences" - this informal relationship, not the contract, controls performance.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[53]

"Long Range Logistics Systems Planning in the Department of Defense," Paul H. Riley, pp. 67-77.

The purpose of this article is to illustrate current long-range planning efforts affecting all logistics functions in the military services and the Defense Supply Agency. An illustrative example (reform efforts in defense petroleum management) provides a timely example of efforts to develop

logistic systems that are compatible, economical, and effective in peacetime and wartime. Reform is considered necessary -- concern has arisen in Congress and the General Accounting Office (GAO) over the uncontrolled proliferation of different automated data processing (ADP) systems used to perform logistic support functions and responsibilities.

The author discusses the efforts of the Office of the Secretary of Defense (OSD) to develop a long-range plan to guide logistics system development and improvement. The framework for the development of LOGPLAN, including functional responsibilities, is described in detail.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[13]

"Financial Leverage and Its Use in the Defense Industry,"
Patrick A. Martinelli, pp. 79-87.

One of the difficult and complex decisions faced by managers in defense firms is the assumption of financial risk through the use of debt (called "financial leverage"). This article elaborates on the concept of financial leverage and seeks to determine the extent of its use by defense contractors.

In discussing the concept of financial leverage, the author notes borrowed funds magnify earnings per share when operating income is sufficient to cover interest charges. Conversely, it magnifies losses borne by equity holders when revenues are insufficient to cover interest charges. A simple example demonstrates the inherent risk of debt financing.

The author's attention shifts to the use of debt by defense contractors. He notes that defense firms have followed the same strategy as non-defense firms -- increasing financial leverage to boost earnings. Many defense firms have risky high leverage ratios. The author concludes that high leverage has brought about two conditions for a number of defense firms: financial stress, and loss of flexibility in management decisions.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[7]

"Aerospace Contract Management -- A Total Involvement,"
James M. Van Tatenhove, pp. 89-95.

The author advocates greater involvement of the contracting professional in the management of the business; in other words, more of a "generalist" role vs. a "specialist" role. Prior to pleading his position, the author defines each role and discusses how each role developed.

In stating his argument for a generalist approach, the author discusses the organizational function of contract

management by dividing it into four areas of involvement: long-range sales and profit planning, annual operating plan, business acquisition phase, and contract performance phase. He concludes the scope of understanding required by the contracting professional in dealing with these areas requires the approach of a "generalist."

PROFESSIONAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [24]

Volume 6, Spring 1972, Number 1

"The Judicial Role of the Contracting Officer in U.S. Government Contracting," William J. Spriggs, pp. 1-12.

This article addresses the role of the contracting officer (CO) in the disputes process. The CO is empowered not only to enter into and administer contracts, but also to make determinations and findings when disputes arise.

This article considers what the law requires of the CO in his dispute resolving role. The author notes that the regulations only briefly cover this important duty. Case decisions are discussed to demonstrate how the CO role developed with regard to the finality of administrative decisions development.

The judicial character of Boards of Appeal, cases on impartiality of the CO, Senate hearings, the results of a American Bar Association study, and over-judicialization are topics of discussion. The author concludes by recommending three alternatives to eliminate this problem; the best alternative is removal of the CO as a adjudicator in the disputes process.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [26]

"Government Procurement as a Means of Enforcing Social Legislation," Herbert Roback, pp. 13-24.

This article presents some of the underlying considerations that link Government procurement to other national objectives. This linkage places burdens on the procurement process. The author describes two approaches to Government procurement from opposite ends of the spectrum: those who consider socio-economic programs as contributing to the increasing inefficiencies of Government procurement, and those who consider the procurement system as the proper vehicle to enforce or advance other desired national goals.

The author discusses how non-procurement objectives change with the times, the ban on price differentials, the cost consequences of harnessing procurement to other objectives, the impact of Government spending, conflicting objectives, multiple sources of authority, and the changing role of the prime contractor as an agent of the Government. The author concludes the situation will get worse before it gets better, and the contracting community will have to make the best of it.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[57]

"Recovery of Interest Expense in the Defense Industry: The Problem and a Possible Solution," H. Robert Weiss, pp. 25-32.

This article examines the position taken by Industry that interest expense should be an allowable cost of doing business, a concept that has been recognized by everyone except the Department of Defense (DoD). DoD refusal is based on the belief allowance of interest would represent a subsidy for poorly financed companies. This would create a bias and inequality.

The author's discussion touches on a variety of related subjects, including lease/rent vs. purchase, the Armed Services Procurement Regulations (ASPR) failure to distinguish between long-term and short-term borrowing, differences in commercial funding and defense funding, and the profitability of commercial vs. defense business.

The author suggests a promising compromise solution would be to allow a general interest cost based on total contractor investment, regardless of whether equity capital or borrowed capital is involved -- a concept known as imputed interest cost. He concludes the benefit to DoD and Industry would be a substantially improved business climate.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[7]

"Confusion: A Cause of Criticism of the Contracting Officer," Joseph L. Hood, pp. 33-49.

This article discusses criticism of the performance of the contracting officers. It seeks to determine if people who perceive discrepancies in contracting officer performance have similar perceptions of the contracting officers role. Prior to describing his empirical analysis, the author identifies three differently perceived roles of the contracting officer: the legal role, the functional role, and the social role.

Previous research efforts that addressed the effect of role perceptions on the performance of managers, provided much

of the theoretical and methodological base of the author's research effort. A restricted cluster type sample was taken from each of two hierarchical levels, within three different types of line procurement organizations and one procurement staff organization. Seventy-seven questionnaires were completed by contracting officer peer groups and their superiors; and staff specialists and their superiors. Data analysis was performed on the responses. The data is presented and its implication discussed.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[26]

"Financial and Legal Aspects of Research and Development," Robert J. Eveld, pp. 51-58.

The 1950's and 1960's were characterized by progressive increases in funding of both Industry and Government Research Development (R & D). In light of recent trends on the part of the Department of Defense (DoD) to curtail R & D contracts, the amount spent through independent R & D (IR & D) is substantial enough to make an understanding of the applicable rules and regulations a necessity.

The author notes the regulations have undergone several changes in the 11-year period 1960-1971. In order to put the subject of IR & D in perspective, the author reviews the evolutionary process of IR & D regulations. Prior to this review, the author defines and discusses a number of pertinent terms.

Deferred IR & D costs and Bid and Proposal (B & P) are also discussed. The author concludes with a list of the actions necessary for a progressive company to negotiate advance agreements for IR & D and B & P expenses.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [68]

"An Examination of Army, Navy, and Air Force Incentive Contract Outcomes," John M. Parker and David L. Belden, pp. 59-74.

The purpose of this article is to present the results of an empirical study designed to measure the impact of a policy shift by the Department of Defense (DoD) and the National Aeronautics and Space Administration (NASA) towards incentive-type contracts.

Contract outcome analysis considered 2,683 completed Army, Navy, and Air Force contracts. Elements of the analysis include the going-in and coming-out profit, overrun/underrun, actual change, and automatic sharing ratio. The basic assumption of the analysis is increasing contractor share of

risks more strongly motivates the achievement of favorable contract outcomes.

The authors describe the incentive environment prior to presenting their analysis. The complete analysis, including data description, statistical analyses, and conclusions are described in detail.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE [33]

"The Acquisition of Major Weapon Systems: Procedure and Problems," Melvin Rische, pp. 75-96.

The purpose of this article is to survey and highlight the procedures and methodology employed by the Department of Defense (DoD) in the acquisition of major weapon systems, as well as some of the unique problems encountered when acquiring such a system. It also highlights contractual provisions designed to cope with these problems.

The author's presentation closely parallels the acquisition process. Thorough overviews of the source selection process and the various procurement stages (from conception to production) are presented. The author also discusses recent policy guidance on major weapon systems acquisition, including DoD Secretary Packard's memorandum that set forth instructions intended to improve the military services management program, and the "fly before you buy" policy. Topics of further discussion include: The Defense Systems Acquisition Review Council (DSARC), contract terms, specifications, performance and cost incentives, acceptance provisions, warranties, system responsibility clauses, milestones and options.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [50]

"The Results of the NCMA Survey of Members -- 1971," Daniel Meigs and Sy Gottlieb, pp. 101-105.

This article reports the survey results of a questionnaire the National Contracts Management Association (NCMA) made available to its members in August, 1971. The purpose of the effort was to gain profiles of the NCMA membership, and their attitudes toward the procurement profession. The results are compared with the data obtained in a 1966 survey.

PROFESSIONAL, POSITIVE, EMPIRICAL, INDUCTIVE [23]

"The New Cost Accounting Standards Clause: A Critique for Negotiation," Dean Francis Pace, Harold E. Sharp, and William G. Findley, pp. 1-16.

This article presents a detailed critique of the Cost Accounting Standards (CAS) Clause. It became effective on July 1, 1972, when the rules, regulations and standards promulgated by the CAS Board became law. The authors' methodology consisted of a line-by-line dissection of the CAS Clause (and its subsequent alterations by the CAS Board, agencies, regulation, and the Defense Contract Audit Agency (DCAA)), and interviews with the CAS Board Project Direction and Industry leaders.

The authors reproduce pertinent sections of the clause and offer annotations to the clause. They conclude if a contractor were to rely upon the literal words of the CAS Clause, he would be misled.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [6]

"Technical Management of Institutional and Program Support Contracts by a Research and Development Organization: Some Policy Issues in Contract Consolidation," Raymond G. Hunt, pp. 17-28.

Contract consolidation is the process of combining previously separate contracts and activities into single packages. The purpose of this article is to identify some of the processes and consequences of consolidating technical services contracts, and to illuminate some of the more important public policy issues they occasion.

The author first discusses support service contracting and the phenomenon, rationale, and goals for consolidation. A description of the author's study methodology is presented. The research strategy was essentially an intensive case study of one particularly large contract. It was supplemented with information gathered from interviews with 34 personnel involved with other contracts, as well as interviews with 12 personnel involved with the fiscal contract. The author's findings are summarized and discussed. Finally, a cost/benefit analysis of contract consolidation is conducted and the results analyzed. The author's conclusions are then presented.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE [23]

**"Liability for Damages Under Federal Government Contracts,"
Dale C. Nathan, pp. 29-32.**

This article analyzes a contractor's potential liability for damages as a result of default on a Government contract. The author first discusses the possibility of liability for damages under cost-type contracts. He concludes since there is normally no basis for default under a cost-type contract, there is likewise no basis for default. Therefore, the focus of this article is on fixed-price contracts.

In a discussion of fixed-price contracts, the author distinguishes between pre-acceptance defaults and post-acceptance defaults. Pre-acceptance defaults are governed by the "Default" and "Liquidated Damages" clauses; post-acceptance defaults are governed by the "inspection" clauses. The author also presents discussions on "contract clauses" and "kinds of damages." A selected bibliography is included.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [22]

"Access to Records," Maynard O. Panser, pp. 35-40.

This article is a critical examination of the Access to Records law. The law is applicable to negotiated contracts and provides that the Comptroller General shall have access and rights to examine relevant contractor documents related to a contract.

The author first examines the General Accounting Office (GAO) and the law. Discussions address Congressional intent in writing the law, GAO interpretation of the purposes of the law, and the landmark **Hewlett-Packard** case. The author then examines the access rights of the Defense Contract Audit Agency (DCAA). DCAA access rights are more dependent upon what the contractor has agreed to than upon statutory interpretation.

This article also includes a discussion of the Government's obligation to provide access to information under the Truth in Negotiation Act (TINA). He concludes with a listing of specific positions taken by contractors to limit Government access to company records.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE

[47]

"Mediocrity or Education?" Martin Gross, pp. 41-48.

This article discusses the current state of the procurement profession, procurement concepts, and procurement education. The author's style is to put forth penetrating questions, followed by observations and suggestions.

The author first discusses the environment in which procurement participation with the technical function may have been held to a minimum, or eliminated, during the evolution of requirements. He then turns to procurement related education and how it should be aimed at developing an appreciation of the significance of procurement within the acquisition process. He also discusses the support role of the procurement manager on the management team. He then discusses the role of procurement as a component of the broader corporate organization.

The author concludes by suggesting how the procurement profession can meet the challenges of the 1970's. Finally, an illustrative model is presented reflecting real-world demand for a text book reflecting the very best of modern procurement techniques.

PROFESSIONAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC
[23]

"For the Betterment of Procurement," Conroy B. Johnson, pp. 49-55.

The purpose of this article is to determine -- by exploring purchasing of products and services by Federal, state, and local Governmental and commercial entities -- if there is sufficient similarity in the purchasing operations of the different entities to merit a uniform basic education curriculum and a broad-based professional recognition program.

The author states these programs are necessary to entice career-minded personnel to achieve a high degree of professional competence in their specialty areas, as well as the broader aspects of procurement. He then examines the purchasing processes of different types of entities for commonality. Processes examined include requirements determination, funding considerations, source selection, contractual arrangements, and customer satisfaction.

Other discussions address Department of Defense (DoD) procurement, uniformity of procurement, the limited availability of education, and the need for professionalism. He concludes there is sufficient similarity among the various entities to merit upgrade of the procurement profession,

through generally accepted formal education and professional certification programs.

PROFESSIONAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [23]

"A Point Rating System for Evaluating Contractor Performance," Harold W. Henry, pp. 57-72.

The purpose of this article is to propose, discuss, and illustrate a modified point rating system for evaluating contractor performance of variable fee (incentive) types of contracts.

The author discusses the nature of incentive contracts, particularly the most common type, Cost-Plus-Incentive-Fee (CPIF) and Cost-Plus-Award-Fee (CPAF). He then discusses the importance of the performance evaluation system in motivating contractor performance, and the limitations of existing performance evaluation systems. A point rating system is proposed to overcome these limitations. The major changes proposed involve the selection and evaluation of criteria, and the method of measuring performance on several of the criteria.

The author discusses the merits and applications of the proposed performance evaluation system. He concludes it provides a much better basis for determining contractor compensation than methods currently in use or proposed.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [43]

"Potential Benefits and Problems Related to Contractor Compliance with Department of Defense Instruction 7000.2 Cost/Schedule Control Systems Criteria (C/SCSC)," Ira O. Whittenberg, pp. 73-80.

The stated objective of DODI 7000.2 is to provide criteria for management control systems to be used by Government contractors on major programs. The philosophy of providing criteria is to allow contractors maximum flexibility in retaining or developing management systems suited to their individual requirements.

The author discusses compliance requirements and the major features of C/SCSC. Problems with implementing C/SCSC are also discussed including: (1) changes in existing management systems, (2) changes in existing accounting systems, (3) requirements for automated data processing equipment (ADP), (4) additional manpower requirements, and (5) Government review of a contractor's systems.

Implementation strategies and the advantages, disadvantages, and limitations of C/SCSC are also discussed.

The author concludes by summarizing the current status of the program.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[43]

"State and Local Procurement: Policy and Problems," John L. Devney, pp. 81-103.

This article is directed at state and local procurement, and the legal background against which these areas of procurement are conducted. State and local purchasing expenditures are expected to expand at a rapid rate; the opportunities for vendors are clear, as are the problems the vendor may encounter.

Generally speaking, all of the states use a central purchasing agency. However, due to differences in statutes, rules, and regulations adopted by the states, the vendor is forced to deal with each state on an individual basis. There are, however, some uniform principles that govern state and local procurement. This article discusses some of these common principles, using Minnesota law to exemplify common principles. Subjects discussed include financing; types of central procurement agencies, scope of authority and internal organization; methods of procurement (competitive bidding and negotiations); and awards. Nine tables, describing state information and sample forms and procedures, are also included.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[24]

"Government Property: Analysis of the Risk of Loss," Robert Bruce Shearer, pp. 105-110.

The purpose of this article is to analyze the provisions of the Armed Services Procurement Regulation (ASPR) that deal with the "risk of loss" for property entrusted to a contractor for performance of a contract. It also illustrates some practical problems arising from current ASPR policy designed to allocate this risk.

The principal subjects of discussion in this article are two paragraphs (ASPR 7-104.24(c)(g) and ASPR 7-104.24(a)(9), referred to as alternative (g) and regular (g)) that identify contractor responsibilities for property under various types of contracts.

The author examines the first line of each paragraph to discern the basic difference in these two provisions. Contractor responsibility under the regular clause is practically absolute; the reverse situation is true under the alternative clause.

This article discusses the implications that arise from this difference. A practical application of the clauses is presented, and a relevant Armed Services Board of Contract Appeals (ASBCA) decision is reviewed. The author concludes with a discussion of an ASPR revision that may eliminate this problem.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[64]

Volume 7, Spring 1973, Number 1

"Terminating the Breaching Contractor: The Problem and A Possible Solution," William J. McGrath and Robert Bruce Shearer, pp. 1-12.

The purpose of this article is to address the serious doubt in the minds of many in the procurement profession, as to the viability of the current default procedures as an effective Government remedy for the breach of contract. To eliminate this doubt, the authors set forth a new contract clause for the involuntary termination of contractor's performance. This clause is meant to apply to Federal contracts awarded by means of formal advertising.

The clause is described in its entirety. The authors believe that its adaptation would result in a reduction in the time needed to effectively remedy a problem situation. It would also reduce administration time and costs by making available a simplified remedy.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[36]

"A Review of Salient Dimensions in International Contracting," Matthew James Travers and Denis O'Sullivan, pp. 13-26.

The authors observe today's reality in international trading relations is an environment in which the U.S. is in a disadvantageous position. Rising trade deficits in the balance of payments are evidence of this situation. They suggest a partial solution to this problem is placing greater emphasis on reducing non-tariff barriers to free trade.

This article suggests that, from a historical perspective, there is a fundamental pattern in the development of international trade. The authors describe how this pattern of protectionism, colonialism, and imperialism is being irrevocably altered because of the accelerated development of science and technology. Next, the authors discuss export licensing and control, including the effects of the Export

Administration Act of 1969 and the Buy-American Act. Emphasis then shifts overseas with a discussion of the foreign contracting party. International Government procurement, negotiating and drafting contracts, taxation, and industrial property are also discussed.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [63]

"Bid Protest Procedures: The Scanwell Issue and Its Impact on Government Contracting," David L. Muir, pp. 27-45.

The General Accounting Office (GAO) has historically been the agency responsible for resolving bid protests. Bidders have been unable to obtain standing in the civil courts under the Perkins doctrine. It states the procurement regulations are for the benefit of the public -- therefore, an unsuccessful bidder has no litigable rights, even when the regulations have been violated.

In the 1970 case of **Scanwell v. Schaffer (Scanwell)**, the court refused to follow the Perkins rule and granted standing to a Government bidder. For the first time in U.S. history, a civil court had accepted a role in the process of awarding Government contracts. The impact of **Scanwell** thus became an important issue in Government contracting. The purpose of this article is to discuss the overall bid protest procedures, the **Scanwell** issue, and the changes **Scanwell** has brought about.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [40]

"Government Property: Further Analysis of the Risk of Loss," B. Alan Dickson and Paul C. Mitchell, pp. 47-49.

The purpose of this article is to further consider an interpretation of the Government's "self-insurance program" under the "alternate" fixed price Government Property clause (suggested by Prof. Shearer in a recent article in this Volume 6 Number 2 of publication). After further consideration, the authors suggest an alternative interpretation of the intent of the clause.

The authors first discuss the basis for Prof. Shearer's interpretation; they examine other sections of the clause to negate his interpretation. They conclude the insurance provision of the clause is not clearly written and contributes considerable uncertainty to the debate over the extent of the Government's self-insurance program under the clause.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [64]

"Letter to the Editor: Comments on C/SCSC Requirements," Robert R. Kemps, pp. 51-55.

The purpose of this letter is to clarify, in the opinion the author, considerable misinformation regarding implementation of Cost/Schedule Control Systems Criteria (C/SCSC). The source of misinformation is an article published in the Fall 1972 issue of the *National Contract Management Journal*, titled "Potential Benefits and Problems Related to Contractor Compliance with Department of Defense Instruction 7000.2, Cost/Schedule Control Systems Criteria (C/SCSC)," by Ira O. Whittenberg, Jr.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [43]

"Project Manager and Procurement Official: Adversaries?" Lewis S. Norman, Jr., pp. 57-60.

The purpose of this article is to suggest a straightforward method for improving the procurement process: establishing a close, continuing and effective professional relationship between the program manager and the procuring official.

The essence of this relationship is program manager understanding of the procurement process, and procuring official understanding of the program manager's tasking. This requires an education process. The author concludes with several suggestions for accomplishing this task.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [24]

"Comparison of Dispute Remedies: United States -- England -- France," Ira O. Whittenberg, Jr., pp. 61-70.

Contractor remedies in the U.S. Government procurement system, being both administrative and legal, have many characteristics in common with both civil and common law systems. Conversely, the U.S. system seems to have lost some very desirable characteristics that are present in the civil or common law systems.

The purpose of this article is to compare the U.S. Government contractor dispute system with a common law system (England), and a civil law system (France). The author discusses how contracting with the U.S. Government involves a potential myriad of problems and pitfalls. He then presents a summary of contractor remedies (administrative and legal)

available in the U.S. system. Subsequent sections present summaries of contractor rights in England and France.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[40]

"The Contracting Officer's Decision -- Another Credibility Gap," Joseph A. Klein and John V. O'Reilly, pp. 71-84.

The Contracting Officer has two distinct roles in the disputes process -- litigant and judge. This article discusses the inherent difficulties in this duality and suggests some possible answers to this problem.

This article first describes three types of disputes: the "non-dispute," the low-key dispute, and the true dispute. The true dispute is the focus of this article. It arises when the contractor refuses to accept the Government's position in a disagreement. It is at this point that the Contracting Officer is supposed to perform the incredible and change roles, from participant to arbiter. Therein lies the difficulty of achieving an objective decision and, from the contractor's view, a serious lack of credibility in the disputes process. The author concludes by suggesting modifications to the process that would create a sense of fairness and impartiality.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC

[40]

"The Use of Demonstration Milestones in Systems Procurement," James C. Horne, pp. 85-89.

This article discusses the milestone concept. It may be described as a means of identifying successive stages during development and acquisition of a major weapon system. At each milestone, the contractor must demonstrate he has accomplished a specific task, at the proper time and within estimated cost.

The author describes the selection of milestones, a process that requires careful coordination with the contractor. He lists three requirements that must be met in implementing the milestone concept. The author provides several reasons for not using the milestone concept as a technique for control in the development phase. Additional discussions address contract structure and contractual issues.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC

[50]

"Subcontract Management -- One Key to Successful Weapon System Development," Robert J. Eveld, pp. 91-97.

This article suggests subcontract management (SM) is one of the most important factors in defense procurement. The author discusses the historical development of SM as an outgrowth of procurement; he points out this development is by no means complete.

A detailed discussion of the function, responsibility and role of SM follows. The author observes in companies where subcontracting represents a substantial part of total procurement, the trend is to divorce the activity from purchasing. The author divides SM into six broad areas of effort. He concludes the impact of SM on profit or loss can be substantial; he suggests close management scrutiny of the SM effort.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE [60]

"Cost Accounting Standards Board: Statement of Operating Policies, Procedures and Objectives," pp. 99-110.

The purpose of this article is to present the operating policies, procedures and objectives by which the Cost Accounting Standards Board (CASB) is formulating Cost Accounting Standards (CAS) in carrying out its legislative mandate under Public Law 91-379.

The "Objectives" section define the following terms: CAS, Consistency, Uniformity, Consistency, Allocability and Allowability, Fairness, Materiality, and Verifiability. The "Operating Policies" section discusses the CASB's relationship with other authoritative bodies, non-defense applications, single Government representative, responsibilities for compliance, interpretations and exceptions. The "Process of Developing Standards" section discusses consideration of existing practices and comparing costs and benefits. Two additional sections include discussions of "Cost Allocation Concepts" and "Other Concepts."

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [6]

"Do Business Reorganizations Violate Anti-Assignment Statutes?" William J. Spriggs, pp. 1-7

The anti-assignment statutes forbid all transfers of contracts with an assignment of claims against the Government until a complete settlement is reached under the contracts. The statutes were designed to protect the Government -- not to penalize the businessman for changes of business structure.

This article raises the question as to whether business reorganizations -- by consolidation of corporations, merger of corporations, dissolution of a subsidiary and subsequent transfer of all assets to a parent corporation, or acquisition of another corporation -- violate the anti-assignment statutes.

The author reviews court decisions and the Armed Services Procurement Regulations (ASPR); he concludes reorganizations, such as mergers and consolidations in which a Government contract is transferred along with all other assets, do not run afoul of the anti-assignment statutes. However, transactions involving partial transfers and transfers to strangers are prohibited, although the ASPR provides that the Government may at its discretion recognize such transfers.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [17]

"Configuration Status Accounting," Stanley E. Wilson, pp. 9-20.

Configuration Accounting (CA) is the bookkeeping side of configuration management. It involves accounting for part numbers, serial numbers, specifications, drawings, other technical data, and engineering changes. This article discusses the configuration accounting methods used by Martin Marietta Aerospace.

The objective of CA are presented. Accounting activities are described in relation to factory and field operations. Data elements of a typical accounting system are enumerated. CA for engineering changes is presented as a key element in controlling the manufacture and quality of a product. Exhibits are given to illustrate the records and form used in change accountability.

Serialization objectives and methods are described, as well as alternative methods for collecting and reporting serial numbers.

The role of CA in final acceptance of the end product is discussed. Exhibits are presented of the final as-built

records used to verify the hardware satisfies the configuration and serialization requirements.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [11]

"Federal Procurement Processes -- The Marketing Concept and the Congressional Procurement Report," Stanley N. Sherman, pp. 21-43.

The intent of this article is to highlight the dynamics and peculiarities of marketing to the Government. It is based on the proposition that marketing strategies must be perceptive of customer processes, problems, objectives, and constraints. Therefore, a study of the Federal acquisition processes would seem necessary for success in marketing to the Government.

Much of this article is based upon data developed by the Commission on Government Procurement (CGP) 1972 report that resulted in 149 recommendations; many would substantially alter the procurement process. This article addresses what impact these recommendations have on market strategies of firms that seek Federal contracts.

This article is presented in six chapters. Chapter I is an introduction, Chapter II discusses the Federal procurement environment, Chapter III discusses the Federal procurement process, Chapter IV discusses Federal research and development procurement, Chapter V discusses marketing sensitive facets of major systems acquisitions, and Chapter VI is a summary and conclusion. The author's overall conclusion is that the recommendations of the CGP carry the promise of a vastly improved return for the investment of the public dollar, and the CGP's concepts have greater practical utility than those promulgated in the 1960's.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [24]

"A Review of Boards of Contract Appeals and Court of Claims Decisions on Disputes Concerning Value Engineering Change Proposals," Ken Jackson, pp. 45-58.

Since 1962, the Armed Services Procurement Regulation (ASPR) has included contract clauses that provide for a contractor to share in cost reductions resulting from value engineering change proposals (VECP) accepted by the Government.

This article discusses six principal issues addressed in sixteen disputes decided by the Boards of Contract Appeals (two were subsequently reversed by the Court of Claims) and other relevant decisions. The author reviews each of these

decisions, then discusses several proposed revisions to the ASPR that appear to correspond to the reviewed decisions. He concludes that these proposed revisions will tend to discourage value engineering efforts by contractors, thus continuing the downward trend in Government savings and contractor earnings from such efforts.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [40]

"Repricing a Government Contract," Frank Reda, pp. 61-70.

Repricing involves a total recalculation of the agreed upon contract price. It embraces not only the work affected by a modification, but all of the work covered by the contract -- even work already performed and paid for. The author first discusses the acceptable methods for adjusting the basic contract price. These methods for pricing contract modifications are equitable adjustments that result in a fair and reasonable price; neither method involves repricing. A third method, reformation, is also discusses.

The author then describes the three types of repricing: total cost, modified total cost, and the jury verdict. The author discusses the basis for repricing. He suggests repricing is rare and resorted to only under exceptional circumstances.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [40]

"Government vs. Contractor -- How to Redress the Imbalance: Openness and Disclosure," Theodore M. Kostos, pp. 75-82.

This article discusses the imbalance in the relationship between the Government and the contractor, and the serious and delicate issues it raises. This imbalance is particularly evident in disputes, where the Government's tremendous leverage can be brought to bear.

The author describes the problem the contractor has in obtaining information regarding facts and the motives of the Government. Part I of this article discusses the extent to which the Government is now urged to disclose information to contractors. Included is a discussion of the Government claim to executive privilege in refusing information requests.

Part II of this article examines the ethical responsibility of the Government to provide full and open disclosure to private parties. The author concludes the Government attorney bears a special responsibility to ensure that such information is produced and made readily available; if Government attorneys frustrate proper adjudication by

preventing discovery, then no Board or Court will be able to provide any real justice in litigation with the Government.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [40]

"Pricing of Spare Parts," Joseph R. Clements and David E. Lyons, pp. 85-91.

This article describes a method, called standard cost plus variance costing, that can be adapted to pricing out a large volume of spare parts expeditiously. The methods described in this article should satisfy a Government preference for the contractor to provide a monitoring system, including a trackable and auditable method, by which the costs of spares would develop. The authors first discuss two acceptable methods for establishing engineering standards and accounting standards. Next, they describe the accounting system treatment of standards.

The authors then discuss three methods for applying variances. The methods are Gross/Factory Wide Method, Family Products, and Individual products. The authors conclude a contractor must adapt a system that fits both his products and his accounting system.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [46]

"Defense Industry Profits Contractor Capital Employed," Lauren D. Lampert, pp. 93-113.

This article details Department of Defense (DoD) development of its Contractor Capital Employed policy. The author suggests that this policy makes substantial gains towards removing the previous disincentives to contractor investment in cost reducing facilities. It also makes gains towards equalizing profit opportunities between different contractors and different levels of investments.

This article first discusses the background of contractor capital employed, the economics of profit, DoD profit policy, contractor objectives, and cost-profit-investment relationships. Emphasis then turns to DoD efforts to implement the new policy, with discussions on applicability, methodology, and the various forms utilized in computing cost of capital and profit. The author then offers a critical evaluation of the policy. He concludes other profit factors need to be considered, including management performance, complexity of work, and assumed risk.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

"Defense Industry Profits -- How Much is Enough," James C. Horne, pp. 115-124.

This article presents a conceptual overview of the present profit incentive structure in defense contracting. The author first discusses the historical perspective of incentives in Government contracts, beginning with the purchase of the Wright Brother's airplane.

He then discusses the development and application of the Weighted Guidelines (WGL) method, originated in the McNamara era, for determining profit. The focus of this discussion is the controversy surrounding the importance of profit as a contractor objective. It raises serious doubts about the motivational effectiveness of incentive arrangements.

The author examines DoD profit policy and the results of studies in order to determine if this policy has been successful. Apparently, this policy has not been entirely successful; a new approach to profit objectives was recently introduced by DoD.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

Volume 8, Spring 1974, Number 1

"The 'Improper Change' and the Contractor's Right to Stop Work on U.S. Government Contracts," William J. Sprigg, pp. 1-9.

The Changes article is one of most significant differences between Government and commercial contracts. It permits the Government to unilaterally order changes to the contract and requires contractor compliance (subject to later determination of price adjustment).

The purpose of this article is to question the propriety of the absolute power of the contracting officer to order changes under the Changes article. The author first discusses the requirement to proceed with the work. He then discusses improper contractual conduct by Government inspectors, and application of the cardinal change doctrine to cases where the contracting officer has ordered changes beyond the scope of the contract. These types of "improper conduct" have been recognized as Government breach of contract by the Courts and Armed Services Board of Contract Appeals (ASBCA).

The balance of the article addresses the author's argument that a similar "improper change" doctrine should apply to the contracting officer, when he orders changes that amount to a

breach of his duty to assist the contractor, are ordered in bad faith, or are unconscionable.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [32]

"Subcontracting: Flow-Down of Contractual Provisions and Risk," Irving York, pp. 11-22.

The "flow-down" of prime contract provisions and risks place much of the burden of these conditions on the party least able to contend with them -- small contractors. Many small contractors do not have the resources to properly read, analyze, or comprehend many of the provisions inserted in their contracts. Nor do they have the leverage to negotiate changes to such provisions.

This article discusses various problems attendant to the subcontracting problem, including statements of work and specifications, difficult technical goals, inconsistent customer requirements, lack of standardized forms and vocabulary, and surveillance efforts. The author summarizes the issues and suggests alternatives and recommendations. He concludes the cost of Government procurement is influenced by these problems and change is in order.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [60]

"Revision of Procurement Regulations for the Purpose of Overriding the Effects of Contract Appeals Board and Court Decisions," Ken Jackson, pp. 25-35.

This article addresses the problem of Government agencies, reacting to Board and court decisions favoring contractors, initiating revisions to regulations and contract clauses designed to override the effects of these decisions. The purpose of this article is to review the authority to make such changes and analyze past changes to identify the extent of the problem. The author recommends actions (other than litigation) to avoid the effects of inappropriate reactions to future Board and Court decisions.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [21]

"Changes in the New C/SCSC Implementation Guide," Brian R. Durbrow, pp. 37-56.

The purpose of this article is to discuss some of the more significant revisions to the Cost/Schedule Control Systems Criteria (S/SCSC) Joint Implementation Guide, released by the

Armed Services in March, 1972. The author suggests the most prominent aspect of the revision is the apparent change of attitude that has taken place in the military-industrial complex. The move from adversarial to cooperative roles has dramatically improved the relationship between Government and Industry.

The author describes the manner in which the Guide evolved and the evolutionary history of C/SCSC. He discusses the significant changes to the guide, concluding with a comparative listing of the old and new criteria.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [43]

"Profit on Capital Employed -- A Viable Alternative?" James A. Nooney, pp. 57-61.

Under Federal Government procurement policy, profit is acknowledged to be the basic motive of business. Attempts are made to use this motive to influence contractor performance. The Federal Government's success in using profit as a motivator has been heavily criticized.

This article examines Department of Defense (DoD) efforts to determine profit criteria based on "cost" versus "capital" concepts. The author discusses the role of profit, inherent problems with profit computation under the Weighted Guidelines, profit on capital as a viable alternative, and the pro's and con's of the two concepts.

The author concludes if the Government is to fulfill its objective of encouraging contractors to invest their own capital, an approach similar to the DoD approach will have to be widely implemented on a mandatory basis.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [46]

"Occupational Safety and Health Act of 1970 Contractual Implications," John E. O'Brien, pp. 63-73.

This article discusses significant primary and secondary effects on the procurement process set in motion by the subject Act. The author suggests the most serious difficulty is not identification of the problem area; it is the lack of a definitive Federal policy to cope with the problems already identified.

The author describes the background and enforcement of the Act and the procedures for obtaining variances from OSHA standards. He then discusses issues and problems associated with the Act. These issues and problems arise from situations

when a Government-owned facility or Government-owned equipment is found in violation of the Act.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[57]

"The Purchasing Manager as a Professional and Competitive Acquisition of Professional Services," S.D. Zemansky, pp. 75-98.

This article discusses two aspects of professionalism. The first aspect is purchasing management as a profession. The second aspect is the procurement of professional services.

In his discussion of professional purchasing management, the author defines "professional," lists the four basic traits associated with a professional, contrasts purchasing management with other professions, and identifies seven facets of a purchasing manager's professional life.

Professional services procurement in Industry and Government generally has not adhered to the same procurement rules and guidelines as other procurements. For example, various types of professional services have been generally awarded without open competition. Additionally, many professional societies have ethics policies that specifically prohibit price competition. The author discusses the rationale for these practices and policies and offers suggestions for reform.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC

[23]

"The Resource Decision Network: A New Display Technique to Aid the Decision-Maker in Assessing Resource Commitments," L.H. Collegeman and P.B. Demitriades, pp. 99-110.

The authors note the primary contributors to management indecision are insufficient information regarding required resource commitments, and lack of visibility of the impact of multiple "go/no go" alternatives on those commitments. They also observe new techniques to assist in the decision-making process (Decision Trees, CPM, and others) do not present the impact of these decisions on resources.

This article outlines a technique, called the Resource Decision Network (RDN), capable of presenting the resource impact that could result from key decisions. The authors use a case study to demonstrate the technique. They discuss how RDN can be used to plan decision milestones, estimate manpower requirements and related costs, and measure performance.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[51]

Cost Accounting Standards: A View from Industry," B.J. Copenhauer, pp. 111-118.

This article assesses the actions to date of the Cost Accounting Standards Board (CASB). The author first discusses the background and objectives of the CASB. He then cites what he considers to be positive actions of the CASB: (1) involving Industry, (2) educating Industry on the CAS process, (3) making the CAS clear and concise, (4) presenting one face to the contractor, and (5) constituting a well-balanced CASB and staff.

Negative actions are then addressed: (1) concentrating on theory vs. practice, (2) inaction by the agencies responsible for CAS administration, (3) the impact of CAS on a contractor's non-Government contracts, (4) emphasis on accounting methods vs. criteria or principles, and (5) the workload burden of implementing CAS. The author suggests ways to improve the process and concludes with final comments to his Industry colleagues.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [6]

"The Role of the Contracting Officer and Procurement Managers in Avoidance and Settlement of Disputes," Emanuel Kintisch, pp. 119-129.

The purpose of this article is to encourage top-level procurement management to place the settlement of controversies with contractors, and successful adjustments of contractor's disputes, high on their list of objectives. By doing so, the avoidance of controversy and expensive litigation is possible.

The author suggests this could be accomplished if procurement managers provided more support and guidance to their contracting officer in the administration of their contracts during performance. This article discusses suggested alternatives for improving the disputes procedures. It also discusses the transition required of the contracting officer - from participant to arbiter -- in disputes. The author concludes dispute avoidance, via improved attitudes of purchasing managers and contracting officers, is preferred to reform of the judicial process.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[40]

"Parametric Pricing of Contract Changes," James C. Horne, pp. 131-140.

This article describes how forward pricing agreements (FPA), utilizing parametric pricing, can aid both the Government and the contractor in knowing the cost, schedule, and performance effects incident to a baseline change (for example, and Engineering Change Proposal (ECP)). The resulting parametric forward pricing agreement becomes a powerful tool for estimating and pricing contract changes.

This article begins with a discussion of the enormous impact contract changes have on the procurement process. The author then discusses the various methods of contract change and equitable adjustment, including FPA's. He then examines the lengthy definitization process encountered when an FPA is not used. Discussions of the need for parametric pricing and weapon system FPA's are followed by an demonstration of parametric forward pricing.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[46]

"A 'MIS-Approach' to Procurement Quality -- The Procurement Integrated Quality Assurance (PIQA) System," Dale E. McNabb, pp. 141-153.

This article is concerned with the quality of the procurement process, particularly the quality of contractual instruments and required file documentation. The author treats procurement quality as a legitimate subsystem of the Management Information System (MIS). He demonstrates how MIS tools and techniques can be applied to the task of designing an integrated procurement quality assurance system. The goal of such a system is to provide adequate management control and feedback with a minimum expenditure of resources.

The author first reviews the inadequacies of past procurement quality assurance "systems." Next, general models for procurement quality, statistical analysis, and the procurement organization are constructed. A review of a developed system (PIQUAS) is conducted, followed by a discussion of the development or adaptation of such a system for a particular buying organization.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[48]

**"Profit on Capital Employed -- A Contracting Officer's Guide,"
Martin Joseph Flaherty, pp. 155-176.**

The purpose of this article is to provide the field procuring contracting officer (PCO) and his negotiating team with a brief review of Department of Defense (DoD) Profit on Capital Employed Policy. It also provides guidelines for implementation of this policy. The concept of profit on cost vs. profit on capital is covered, as well as a brief explanation of problems encountered with the previous Weighted Guidelines System.

This article is presented in two parts. Part I -- Concepts; discusses capital, profit, policy, problems with current policy, and changes to cost based on Weighted Guidelines objectives. Part II -- Methodology; discusses the applicability of a Contract Capital Index, assumptions, and types of capital. Part II essentially explores the steps involved in developing the Profit on Capital system. Appendices include a list of abbreviations, a list of definitions, a checklist of steps involved in preparing the pre-negotiation, and a checklist for consideration after cost negotiation, prior to fee.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

Volume 8, Fall 1974, Number 2

**"Extraordinary Relief from Runaway Inflation -- A New Look at
Public Law 85-804," Richard C. Johnson and John S. Pachter,
pp. 1-14.**

Periods of runaway inflation impact heavily on Government contracting. Many contractors see profits vanish when there are drastic and unexpected surges in inflation; some are faced with bankruptcy. When these contractors have sought relief before the Courts or Boards of Contract Appeals, the response has generally been unsympathetic. Apparently, spiralling costs are no excuse for nonperformance.

This article discusses the possibility of seeking "extraordinary" relief under Public Law 85-804. It allows the Government to excuse performance under Government contracts, or increase the price of the contract, without regard to other legal rights and remedies. The authors outline the possibilities for obtaining relief from inflation under Public Law 85-804. They discuss agencies empowered to grant relief, avenues of relief, the scope of compensation available, relief

for subcontractors, exhaustion of other remedies, and processing an application for relief.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [22]

"Office of Federal Procurement Policy: The Legislative Background," Herbert Roback and Charles Goodwin, pp. 15-36.

Foremost in the long list of recommendations to Congress by the Commission on Government Procurement in 1972, was the creation of the Office of Federal Procurement (OFPP). The Commission recommended OFPP be a component of the Office of Management and Budget (OMB). The Commission believed that OMB, in its budget-making and executive management capacities, has the kind of influence and leverage over the procurement agencies OFPP needed to fulfill its mission.

This article discusses the main issues and events in the development of OFPP legislation, from the time it was recommended to the Congress in December 1972, to its final enactment August 30, 1974. The purpose of this article is to provide a better understanding of how the new agency came into being, and what it portends for Federal procurement. The authors conclude OFPP may or may not perform according to the expectations of its advocates. It will, however, have many opportunities to make a difference in Federal Procurement.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [23]

"Cost of Capital," Ken Jackson, pp. 37-41.

It is generally accepted that the cost of capital should be recognized, explicitly or implicitly, in Federal procurement. Inadequate recognition is the object of increasing anxiety because of the high (experienced or imputed) cost of capital rates, the shrinking availability of capital, the inability to make correct business and accounting decisions because of unallowability rules, and other factors. A project of the Cost Accounting Standards Board (CASB) on "Cost of Contractor Capital," has raised hopes of those in favor of a change in Federal policy leading to increased recognition.

The author is a proponent for policy change. However, he makes a case against any change in policy, argues against preferred forms of improved recognition, and indicates areas where additional data may be claimed to be needed. His purpose is to adequately prepare proponents of policy change for

significant counter-arguments that might erupt at the last moment to defeat needed improvements in this area.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[7]

"Further OSHA Developments," John E. O'Brien, pp. 43-45.

This article describes several developments since the author's article "OSHA-Contractual Implications" was published in the Spring 1974 issue of the National Contract Management Journal. Developments discussed include the narrowing of differences between the Departments of Defense (DoD) and Labor (DOL) on the matter of section 16 variances of the Occupational Safety and Health Act (OSHA); DoD guidance issuance regarding compliance with OSHA responsibility; non-conformity of Government-furnished property or facilities; and other topics.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [57]

"Forecasting Inflation," H. Lynn Hazlett, pp. 47-59.

In the early 1970's, inflation is considered the greatest problem in the U.S. In the area of systems acquisition, inflation was identified as contributing 30 percent of the cost growth of systems acquisitions analyzed in a Comptroller General (CG) report. The author suggests to control inflation we must understand how inflation is measured.

This article puts "forecasting inflation" in perspective by discussing inflation and the national budget outlook. The author then focuses on the impact of inflation on weapon system procurement. The balance of the discussion serves to develop the Cost Growth Index Model, and how data from the model can be linked to Econometric Model data. The vehicle to be used in quantifying escalation is the Forecasting-Link Model developed by the author.

The author concludes the Forecasting-Link Model provides the manager with a tool for use in equating, ex-ante, the relationship between a firm's rate of cost escalation and inflation expectations associated with the national economy.

THEORETICAL, NORMATIVE, EMPIRICAL, DEDUCTIVE

[7]

**"ASPR 7-103.5 Inspection -- Is What You See All You'll Get?"
Jeffrey L. Michelman, pp. 61-64.**

This article seeks to determine the scope of the Government's right to insist on certain inspection procedures in determining if contractor's "inspection system" is acceptable. As noted by the author, an acceptable inspection system is not defined in the Armed Services Procurement Regulation (ASPR). It is unlikely it will be defined in the solicitation specifications. It is not defined in DCASR's DSAM 8200.1 "Procurement quality Assurance." In truth, an acceptable inspection system might depend ultimately on the whim of the local Defense Contract Administration Service Region (DCASR) Quality Assurance Representative (QAR), or other Government Inspector.

The author discusses the various contract quality requirements -- ASPR Section 14, the Standard Form 32 Inspection clause, and Military Standards MIL-I-45208 and MIL-AQ-9858A. He concludes the regulatory intent of the ASPR is to require an inspection system be an end-item inspection system only -- not a system for all stages of the manufacturing process.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[35]

"The Human Side of Value Engineering," David G. Freeman, pp. 65-73.

The author suggests that in the ten years following the issuance of Defense Procurement Circular (DPC) No. 11 implementing Value Engineering (VE), attempts to measure the success of VE have been inconclusive. He believes the apparent lack of success is due to a "structuralist" approach -- rewards and punishments -- by the Department of Defense (DoD) in implementing VE. This approach corresponds with McGregor's "Theory X."

The author believes VE implementation requires a "human relations" approach that considers the changes process from a behavioral science perspective, and the effect of participation by workers in decision-making. This approach corresponds with McGregor's "Theory Y." He proposes a simple research proposition to isolate organizations that have been successful with VE. He then tests his proposition to determine which approach -- Theory X or Theory Y -- has made them successful.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[55]

"Integrated Project Control: Control Cost, Schedule and Performance for Maximum Profit!" Gerhard L. Hollander, pp. 75-94.

This article presents a new approach for managing complex programs or projects. It has been used successfully on an experimental basis in the management of several large projects; it can also be applied to smaller, less complex projects.

Integrated Project Control (IPC) is a new approach to describing alternatives by incentives and cost function. It assists managers in making trade-off decisions regarding cost, performance, and schedules, that will maximize profit (or similar organizational objectives).

The first section of this article examines the fundamental relationship between the buyer and the seller's organization. Subsequent sections discuss cost/schedule trade-offs, incentive and activity cost functions, network examples, PERT, practical implementation of IPC, and its implications.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [51]

Volume 9, Spring 1975, Number 1

"The General Accounting Office As An Independent Agency," Ruth E. Ganister, pp. 1-25.

This article examines how the wide range of power exercised by the General Accounting Office (GAO) evolved, and how it has come to perform executive, legislative, and judicial functions. The author suggests that as the GAO continues to develop its independent status within the Government, it becomes clear the functions it performs pose significant separation of powers questions under constitutional law. It is the purpose of this article to consider some of those questions.

The author traces the statutory authority and history of the GAO. She discusses the separation of powers problem, and the claims problem. She also discusses the GAO's relationship with the executive, legislative, and judicial branches of Government.

The author concludes that the functions being performed by GAO violate the constitutionally valid separation of powers doctrine. However, it is unlikely any of the branches will challenge the situation.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [47]

"In Search of Fairness: The 'Limitation of Cost' Odyssey," Kenneth M. Jackson and Martin C. Nielsen, pp. 41-57.

The purpose of this article is to critically examine the state of the law and the quality of decisions regarding "Limitation of Cost" (LOC) and "Limitation of Funds" (LOF) contract clauses.

The authors discuss the LOC clause and its purpose: (1) to control cost overrun, (2) to obtain "notice" so that administrative processes can occur on a timely basis, and (3) to avoid non-compliance with the Anti-Deficiency Act. They also discuss origins and interpretations of the clause. The authors describe problems associated with the communication requirements of the clause, and the necessity to maintain a system to prevent cost overruns. Waivers and recovery under a quantum meruit theory are also discussed.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [37]

"The Current State of the Law on Warranties and Consequential Damages," William J. Spriggs, pp. 59-69.

The purpose of this article is to provide contract managers a handy reference to the current regulations on warranties and consequential damages. A critique of the regulations is also provided.

The author describes the revisions to the warranty section of the ASPR that added warranty clauses to the section setting forth clauses for Government contracts. Other sections discuss warranty definition, approval, limitations on use, preparation, pricing aspects, and technical data. The new clauses are discussed, as is consequential damages, third party liability, and the new Reliability Improvement Warranty (RIW). Hints to the contract managers are also suggested. The author concludes the new warranty coverage represents a good step forward.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [39]

"What's Happened to the Basics?" William W. Thybony, pp. 71-85.

The author observes the modern procurement process has become very complex and diverse; it is also beset by a number of problems. He suggests the process could be simpler, procurements made sounder, and problems avoided if the process rested on a firm foundation of the basics.

The purpose of this article is to discuss the basics. Prior to presenting a condensation of principles

representative of the basics, the author discusses the historical evolution of procurement law from which they are derived. Definitions of basic terms are presented; including procurement contract, contract types, and ethics.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [4]

"Reinstating Competition in Systems Acquisition: A Four-Dimensional Framework," Robert B. Hall, pp. 87-104.

Observers of systems acquisition practices contend systems acquisitions are no longer suitable for a competitive environment. This is due to the complexity and great cost of defense systems.

This article argues that it is not cost or advances in technology causing the shift to a non-competitive setting. The underlying causes are how the statement of work is presented and the way we seek to advance technology.

The author discusses the confused buyer-seller roles that have emerged in our era of high technology, and how competition has been affected by the confusion. The bulk of this article is dedicated to describing a system acquisition framework (suggested by the Commission on Government Procurement) the author believes will address the underlying causes.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [50]

An International Code on Government Procurement: Fact or Fiction?" Matthew J. Travers, Jr., pp. 105-110.

Government procurement involves the purchasing of goods and services by a Government; it represents almost one-quarter of the world's gross national product. Although there have been significant efforts to guide most aspects of international trade (tariffs, trade agreements, etc.), these efforts have had only limited applicability to Government procurement. In fact, the General Agreement on Tariffs and Trade (GATT) expressly excludes Government procurement from its guidelines. The result has been the rise of non-tariff barriers to free trade in Government procurement.

This article discusses current efforts by several organizations to curtail discriminatory Government procurement practices. These organizations include the Organization for Economic Community (OECD), and the European Free Trade Area (EFTA). A draft of the OECD International code on Government procurement is included.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [63]

"Return on Assets Consideration for Contract Administrators," William D. Chisholm, pp. 111-120.

Return on assets (ROA) is a measure of profitability and the effectiveness with which capital is being utilized. The corporate contract administrator (CA) has a responsibility to maximize his company's profit return (ROA); he has direct and indirect opportunities to affect ROA.

The purpose of this article is to provide a list of factors and actions that might affect ROA throughout the life cycle of the CA's activities. These factors are presented as encountered during the different phases of the contract cycle; from proposal and negotiations, to contract closeout.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC []

"The Games People Play in Source Selection Competitions," Gerald F. Keely, pp. 121-131.

This article discusses the gamesmanship typically present in the source selection competition for major systems. The author implies that gamesmanship presents a barrier to a professional approach to preparing an acquisition plan and/or solicitation package; it also affects the overall credibility of the selection process.

This article is presented in six parts: The Problem; Government Games; Industry Games; Examples; Conclusions; and The Message (a list of Do's and Don'ts). The author discusses gamesmanship actions, personal experiences, and actual source selection examples.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [34]

"DCAS's Systems Analysis Approach to Subcontracting Requirements," Henry Simon, pp. 133-137.

To perform the Defense Contract Administration Service (DCAS) mission (described by 69 contract administration functions) on the huge volume of defense contracts requires the use of specialists and a systems analysis (SA) approach. SA is conducted on those parts of a contractor's operations that heavily impact the Department of Defense (DoD) procurement dollar.

This article deals with the systematic utilization of specialists in the examination of a contractor's procurement system. In recognition of the cost reduction potential present in a good contractor procurement system, the Contractor Procurement System Review (CSPR) was established DoD-wide and

aggressively implemented by DCAS. This article discusses how DCAS conducts reviews, as well as considerations impacting performance in the area.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [60]

Volume 9, Winter 1975-76, Number 2

**"Controlling Risk in Reliability Incentive Contracting,"
Robert M. Springer, Jr., pp.1-9.**

The reliability incentive contract is a relatively new and innovative type of contracting technique designed to encourage contractors to develop equipment that performs well, has good reliability, and low maintenance costs. The purpose of this article is to describe and discuss several of the main types of reliability contracts, and possible actions the contractor can take to control his risk and increase his probability of success.

The author discusses how reliability contracts differ from traditional contracting techniques like warranties. He also discusses the reliability paradox faced by contractors: if reliability is increased, downstream maintenance support item demand can be lost. The author concludes with a discussion of ten strategies the contractor might consider when entering into a reliability incentive contract.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [33]

**"Scanwell Completes the Full Circle," William H. Butterfield,
pp. 10-16**

This article discusses the litigation initiated by Scanwell Laboratories, Inc., and its impact on the procurement process. Scanwell resulted in a landmark decision that held a disappointed bidder for a Government contract has standing to challenge in Court the award of that contract to a competitor.

The author's purpose in writing this article is to trace Scanwell's pursuit of meaningful relief to highlight what it achieved, what it didn't achieve, and what the case means to contractors who might need future court intervention into the procurement process.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [22]

"Logistic Evaluation in a Competitive Situation," Donald M. Keith, Charles A. McCarthy, and William J. Haslem, pp. 17-30.

The purpose of this article is to provide acquisition managers with a sound subjective and numerical basis for evaluating the area of logistics support in a competitive acquisition. This methodology will: (1) identify contractor-performed logistic tasks and efforts, normally performed after award, that can be evaluated as a basis for award; (2) categorize and prioritize these tasks and efforts, (3) propose criteria for evaluating logistic support effort portions of the contractor's tasks and efforts, and (4) use a systematic numerical approach to subjectively evaluate multiple options.

The authors discuss current acquisition philosophy, the examination of primary source documents, possible early contractor logistic efforts, subjective evaluation criteria, and the numerical evaluation. They conclude the support proposal selected will, over the life cycle, result in the expenditure of the greatest amount of resources committed to a particular acquisition. Therefore, the responsibility inherent in support selection must be exercised with care and preparation.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [34]

"A Note on Recent 'Successful' Bid Protests," Ken Jackson, pp. 31-43.

The author notes that success in bid protests made to the General Accounting Office (GAO) is in the eye of the beholder. It may be seen as preventing an award, receiving a recommendation to award to the protestor, receiving a recommendation for cancellation of an award or termination of a contract, or the reopening of negotiation or a resolicitation.

Success, for the purpose of this article, is defined as those formal decisions of the GAO rendered between January 1, 1974, and September 30, 1975, in which the GAO sustained a protest and recommended a remedy effective under the circumstances of the protested procurement. These decisions are tabulated as an appendix to this article.

The author discusses bid protest statistics for the period and assesses GAO's performance, including the revision of Bid Protest Procedures, resolution of serious defects in its authority, and the lack of effective adjudication. He concludes there is much room for improvement in providing an effective forum for relief of aggrieved bidders.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [22]

"Constructive Changes," Irwin Newman, pp. 44-48.

Constructive changes doctrine is not unique to Government contracts, and the concept serves several purposes. One purpose is the prevention of unjust enrichment when a contractor performs at Government direction, but fails to receive a formal change order. A second purpose is it allows the Contract Appeals Board to retain jurisdiction over an action that otherwise would be a breach of contract.

This article examines various aspects of constructive change; primarily, what causes a constructive change to arise. Faulty Government data (drawings, designs, and specification) is one cause. Acceleration and deceleration of contract work, revisions in methods of work, acts of Government representatives, and impossibility are other causes examined in this article.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [32]

"Handling Major Claims Under Defense Contracts," Melvin Rische, pp. 59-80.

The purpose of this article is to describe some of the major principles to consider when handling Government contract claims. It presents an overview of how claims are prepared for and processed within the Department of Defense (DoD). The author suggests a lack of appreciation for these principles has been a major cause of the current "claims" confrontation between Industry and Government.

This article outlines the basic steps a contractor should follow when preparing a claim under a contract with DoD. It also reviews the steps that must be followed when asserting a claim. It also outlines a format that should satisfy DoD criteria for claims justification packages.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[40]

"Design to Cost -- A View from the Contract," Stanley E. Wilson, pp. 81-88.

This article discusses Design to Cost (DTC) in its contractual application. DTC is examined in relation to program phase, contract type, cost elements, and funding. Association of DTC with other contract provisions is presented, particularly value engineering. Requirements for measurements, re-estimates, and reports are described. The relationship of DTC to the contractual baseline is discussed, with attention given to changes and change control. Contractor

obligations under DTC are examined. Opportunities for penalty and/or profit are also discussed.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [51]

"An Irish Pennant," R.G. Sollenberger, pp. 89-95.

This article discusses hardware exclusion clauses, currently in vogue (in one form or another) in a number of Federal agencies. Closely associated with Organizational Conflicts of Interest (OCI), the clauses restrict the opportunity for a contractor engaged in Research and Development (R & D) to participate in follow-on hardware contracts. The Government views the application of the clause as necessary to prevent contractors from gaining an unconscionable competitive advantage through Government support.

The author is highly critical of this practice as unnecessarily unfair to the R & D/production contractor. Furthermore, this practice is not in the best interest of the Government, since the "best" potential candidate for contract award is often excluded. The author urges the discard of current OCI concepts and suggests several alternative concepts.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [30]

"A Study of Negotiation Planning," Lloyd C. Wade, pp. 96-105.

The purpose of this article is to examine several planning strategies from a theoretical perspective, and their effect upon negotiations. The methodology employed is referred to as the Qualitative Dimensional Approach (QDA). This approach tends to emphasize definitions for the purpose of characterization and analysis from a management standpoint. The primary function of this approach is to fabricate a general framework for understanding some important subject areas in negotiating strategies.

The author suggests there is a need for a systematic study of negotiation. He discusses the procurement and contract manager's perspective of negotiation. Three planning strategies are then analyzed: Frederick W. Taylor's Scientific Management Approach, Chester L. Karras's Approach, and Schrode and Voich's Circular Process Decision Model.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [42]

"Some Historical Notes, with Comment on Procurement Law in the Confederacy," B. Alan Dickson, pp. 106-111.

This article discusses the history of several precedents and techniques that are practically traditions within the Government procurement process. It is presented in two parts. Part I provides historical examples of the Disputes Procedure, the Changes Clause, and the Bid Protest. Part II discusses rulings of the Confederate Attorney General on several topics, including compensation for Government delay, impossibility of performance, Federal-state relationships, Government sovereignty, and extra compensation for material shortages.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [22]

"Arming America: How the U.S. Buys Weapons, A Book Review," Stephen R. O'Neil, pp. 112-122.

This article is a review of J. Ronald Fox's Arming America: How the U.S. Buys Weapons (Howard University Press, 1974). The reviewer considers it mandatory reading for all those involved (or interested) in the process through which the Government acquires its military equipment. The entire acquisition process is presented in an easily followed format. The reviewer suggests the greatest benefit of this book is Mr. Fox's ability to present the perspectives of both sides -- Government and Industry -- on the procurement process.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [50]

Volume 10, Summer 1976, Number 1

"A More Critical View of Warranties and Consequential Damages in Government Contracts," Charles D. Woodruff, pp. 1-14.

In this article the author takes the reader through Armed Services Procurement Regulation (ASPR) 1-324; paragraph 7-105.67 warranty clauses; ASPR 1-330, the partial coverage of consequential damages; and paragraph 7-104.45 Limitation of Liability clauses. His objective is to detail how poor and ineffective the coverage of the warranties and consequential damages is in the ASPR.

Topics discussed include that purpose of warranties, criteria for use, latent defects, commercial items, preparation of warranties, clauses, consequential damages, insurance exclusion problems, and subcontractors. The author concludes three steps are needed to make the Government's

policy of self-insuring effectuate its purpose of reducing costs to the Government by enabling contractors to reduce insurance premium costs. The current policy probably fails to save money; it is also costly to administer.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [39]

"Allowable Costs," Ken Jackson, pp. 15-54.

A "allowable" cost in Government contracting is an incurred cost that has passed tests at every turning point in an intricate labyrinth of tests. The tests are prescribed by statutes, regulations, Cost Accounting Standards Board (CASB) promulgations, court decisions, generally accepted accounting procedures, instructions for auditing, and other authoritative writings.

In view of the complexity of cost allowability tests, the author has prepared an annotated index to more than 300 references. The result is a comprehensive research tool covering most cost transactions.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [16]

"How Socio-Economic Government Procurement Programs Might Be Improved," Douglas R. Haley, pp. 57-72.

Significant problems have been encountered in the implementation of the Small Business Subcontracting Program (SBSP) since its enactment in 1953. The results of the program are considered inadequate by Government agencies. This article describes a study conducted to determine how the program can be improved.

Four programs are addressed in this article; each program is an adjunct to the SBSP. The author's intent is to inform the reader of their existence, to describe them, to report the results of research into the business community's response to them, and to suggest a means for testing such proposed programs.

The results of 242 questionnaire (sent to 14 representative aerospace company) respondents are provided to indicate the degree of support that exists for each program. The author concludes that any proposed program that appears to have merit should be subjected to a mini-test to assist in a decision to fully implement the program.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE [57]

"Federal Procurement Personnel: Their Job-Related Training," Joseph L. Hood, pp. 73-89.

This article examines the knowledge and skill possessed by personnel working in Government procurement. The size of the annual Federal procurement expenditure prompts people (inside and outside of Government) to be concerned about the abilities of the personnel through which this expenditure is made.

The objective of the research reported in this article is to explore the self-learning projects of those persons working in the occupation of Federal procurement. The source of the research data was personal interviews with 34 GS-1101 and GS-1102 personnel (pay grade GS-12 and higher) and archive data. The author discusses his findings related to nine research questions, incidental findings, conclusions, implications for management.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[23]

"Some Thoughts on Professionalism," A. Raisters, pp. 91-105.

This article attempts to eliminate confusion about what constitutes professionalism. The author discusses various aspects of professionalism, and the basic sequence and steps that established professions (medicine, law, etc.) have undertaken in order to achieve their status. The remainder of the article is dedicated to the development of systematic approach to establish acquisition and contract management as a bona fide profession.

The author concludes with a matrix format table that summarizes the five criteria for professionalism and the eight means by which it can be achieved.

PROFESSIONAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[23]

"Questionable and Illegal Corporate Payments: A Plea for Reform Without Hypocrisy," Matthew J. Trawers, Jr., pp. 109-115.

This article discusses a subject of significant concern within the U.S., other countries, and the international community: corporate involvement in the making of questionable and illegal payments, (i.e., committing bribery).

The author begins by discussing the pro's and con's of corporate bribery. He conclusion is that bribery is a serious national problem requiring corrective action. The author discusses various measures available to curtail the problem, including criminalization and reporting and disclosure requirements. Since the majority of bribery payments are made

to foreign parties, the author believes international cooperation is essential to curtail the problem.

The author suggests procedures to curtail the problem, primarily the modification of U.S. procurement regulations regarding reporting and disclosing questionable payments. Violation of the regulations should be penalized. Penalties would include contract termination and substantial liquidated damages.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [54]

"The Procurement Workforce Career Growth and Educational Potential," Anthony G. Ratkus, Jr., pp. 117-133.

This article discusses the consensus opinion among Government and Industry that there is an increasing need for a well-trained and educated procurement workforce. Similarly, improved educational and specialized training opportunities are necessary to develop and sustain the required procurement workforce.

The author first describes Government actions to establish centralized responsibility for providing training, performing, research and advancing the field of procurement. Next, he presents a cross-section analysis of the Government procurement workforce.

A comprehensive description of educational programs is presented, followed by a discussion of the general career potential within the procurement profession.

PROFESSIONAL, POSITIVE, EMPIRICAL, INDUCTIVE [23]

"The Stomanthom Technique Applied to a Highly Complex and Unstructured Problem," James T. Stoms, Edgar J. Manton and John E. Thomas, pp. 135-140.

This article describes a technique that will assist managers in solving complex and unstructured problems. The technique includes multiple regression analysis and a linear programming simplex algorithm.

A demonstration of the technique is provided by utilizing a common problem that confronts a contract project manager under a cost-plus-award-fee (CPAF) contract. The Stomanthom Technique provides an objective method to aid the manager in maximizing subjective performance scores. This technique, by providing a degree of objectivity to problems of this type, will serve to reduce the level of subjectivity.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[43]

"Analysis of the System Responsibility Concept," Fred W. Helwig, pp. 141-150.

System responsibility refers to holding contractors responsible, technically and financially, for fulfilling the technical requirements of the system specifications; and integrating all system equipment and components. The degree of system responsibility is affected primarily by the amount of financial responsibility/liability transferred to the contractor. The type of contract is a major determinant of the amount of financial responsibility/liability transferred.

This article discusses two premises set forth by the author. The first premise is that true system responsibility can only operate in a fixed-price environment. The second premise is that performance specifications must take precedence over design specifications that describe the system.

The author discusses use of system responsibility contract provisions by each of the Department of Defense (DoD) services, factors affecting use of the provisions, and associated problems with their use. The author concludes the two premises limit the use of the provisions; if these limitations aren't recognized, misunderstandings and difficulties will arise in the negotiation and administration of Government contracts.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [37]

GAO's Bid Protest Procedures Are Substantially Unconstitutional," John H. Love, pp. 151-161.

The purpose of this article is to provide a legal analysis of the broad question of whether or not the General Accounting Office (GAO) "Bid Protest Procedures" meet the full requirements of due process of law. Particular emphasis is given to the functioning of the GAO under current regulations and the Freedom of Information Act (FOIA).

Prior to analysis, the author discusses pertinent portions of the "Bid Protest Procedures," FOIA, and principles of due process of law (as described by the Fifth and Fourteenth Amendments and case law). His detailed analysis is followed by specific recommendations to integrate FOIA into the "Bid Protest Procedures."

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [22]

"Major Acquisition Problems, Policy and Research," Richard J. Lorette, pp. 1-14.

DODD 5000.1, Acquisition of Major Defense Systems, was issued on July 13, 1971. Despite the concerted efforts of experienced, competent personnel to implement the directives, the author contends that critical, fundamental, familiar problems contrive to frustrate the best attempts to acquire major defense systems. His contention is supported by media accounts of problems surrounding the procurement of the FB-111 and C-5A aircraft, among others.

In this article, the author reviews the problems that led to DODD 5000.1; evaluates the success of the directive in resolving those problems; indicates related research topics; and suggests a new approach to major systems acquisition.

The approach is called Award Rotation Concept (ARC). Under ARC, large, capable contractors would essentially take turns on being involved with major defense system contract awards. The author discusses why ARC is possible, feasible, and ultimately beneficial.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [23]

"Strengthening Procurement Professionalism: The Federal Procurement Institute," Robert M. Springer, Jack L. Livingston, and Thomas E. LaMoure, pp. 16-19.

The Federal Procurement Institute (FPI) was established by the Executive Branch on July 14, 1976. Its overall objective is commitment to developing the skills, knowledge, and abilities of Federal procurement research, education and training, and career development.

This article discusses the key characteristics of the FPI and the FPI Implementation Plan. One implementation action discussed is the evaluation of programs of professional societies like the National Contract Management Association (NCMA). The authors conclude the FPI is off to an excellent start and is likely to become an influential force for strengthening procurement professionalism.

PROFESSIONAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [23]

"Procurement Problems During the American Revolution," B. Alan Dickson, pp. 20-23.

This article begins by noting a fundamental dissimilarity between colonial and modern Government procurement: the idea of the business contract. In colonial times, contract was a relatively undeveloped legal area.

After noting this dissimilarity, the author describes a variety of challenging procurement problems confronting General Washington and the Continental Congress during the Revolution. Some of the problems encountered included late funding by Congress, late payments to contractors, profiteering from the war trade, and inflation.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [23]

"Decreased Costs and Increased Profits Through Incentivized Overhead," Dorsey J. Talley and William S. Curry, pp. 25-32.

This article proposes an innovative approach to achieve large cost savings: use of a profit incentives to encourage Government contractors to reduce their indirect costs. It is based on an advanced agreement -- with a specific arrangement for determining the sharing of savings or overruns of overhead costs -- between the contractor and the Government. An example is presented to describe this incentivized advance overhead concept.

The authors conclude implementation of this concept would contribute to lower costs to acquire weapon systems. Some potential benefits to Government, Industry and the public are listed.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [46]

"The Anti-Deficiency Act Comes to Life in U.S. Government Contracting," William J. Spriggs, pp. 33-42.

The Anti-Deficiency Act (ADA) is a felony statute that prohibits any officer or employee of the United States from contracting in excess of available appropriations or in advance of appropriations. This article discusses the ADA in the context of an Army violation of the Act.

Discussions include the effect of violation of the ADA in the making or administration of a contract, decisions rendered under the ADA, and the legal status of the subject contract. The author concludes that when faced with a deficit of funds, contracting officers should terminate for convenience.

Continued performance awaiting additional funds is a clear violation of the ADA.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[22]

"The Role of the General Accounting Office in Detecting and Reporting Kickbacks," Francis M. Doyal and Leslie L. Megyeri, pp. 44-46.

This article discusses the controversial issue regarding an independent auditor's responsibility to detect or report fraudulent "related party transactions," and other criminal acts. The related party transaction is a situation where an employee illegally uses his position to make money. Soliciting kickbacks is one such transaction.

Kickbacks are specifically illegal under the Anti-Kickback Act of 1946. This article describes the Act and the role of the General Accounting Office (GAO) regarding kickbacks. Officially, GAO does not conduct audits for the purpose of discovering kickbacks. This responsibility rests with the contractor and the contracting agency. Auditors uncovering suspected criminal violations are to report them to appropriate law enforcement agencies and take no further action.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [47]

"Setting and Meeting Profit Guidelines in the Procurement Process," G. Stevenson Smith, pp. 47-53.

This article reports on a survey of 44 fixed fee cost reimbursement (Cost-Plus-Fixed-Fee) contracts chosen at random from the contract files of the Department of Housing and Urban Development, Office of Procurement and Contracts. The objective of the analysis was to determine if there was a relationship between the percent of profit awarded on these contracts and the guidelines listed in the Federal Procurement Regulations (FPR).

The author concludes there is no significant relationship between the selected fee determination guidelines and the actual fee award. To correct this situation, the author suggests a method that would provide more correlation between the fee award and contracts with similar guideline characteristics.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[46]

"Proposal Evaluation and Simulation," Robert Williams, pp. 54-63.

Proposal evaluation in the Department of Defense (DoD) has been plagued by many problems. In particular, evaluators have been driven to recommend award to a offeror who does not have the best proposal ("wrong" offeror), or must give decision makers two or more proposals having almost identical evaluations ("dead heat").

The author suggests these problems can be avoided by spending more time on evaluation planning, including the selection and weighing of evaluation factors. He describes how this process can be accomplished quickly, accurately, and with more flexibility by automated means. One such means (described in detail) is Computer Assisted Total Value Assessment (CATVA). The author concludes evaluation planners can use simulation to make more efficient use of resources and lead to a more objective and credible source selection.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[34]

"Contract Administration, Navy Style," William E. Colby, pp. 61-63.

This article is a critique of the organization of the plant-cognizant system by the military services, particularly the Navy Plant Representative Office (NAVPRO). Plant cognizant activities are resident in major weapon system contractors plants; their purpose is contract administration and surveillance. One of the most distinguishing characteristics of a NAVPRO is the way the Program Manager concept is employed in the plant.

Each major program is assigned a team of specialists under a senior military officer who is responsible for the administration of the contracts under his programs. The authors primary criticisms are: (1) the military officer is less-skilled than his highly-skilled civil service staff, and (2) the military officer wastes valuable staff man-hours gathering information that may not be needed.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [28]

"Do We Really Want Research on the Acquisition of Major Weapon Systems?" Richard J. Lorette, pp. 64-69.

The objective of this article is to examine procurement research towards solving problems in the acquisition of major weapon systems. The author first defines "procurement," "acquisition," and what constitutes "procurement research." He then describes a myriad of problems that characterize major systems acquisition; he compares today's problems with those of the past. In fairness, he describes a number of facts that make acquisition an extremely difficult endeavor.

The author then concentrates on procurement research -- how it can assist the acquisition workforce, and what should be researched. He concludes that the best idea might be to devise a completely new and different system.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [23]

"A New Approach to Procurement Administration Lead Time (PALT) Management, a Continuing Procurement Problem," Kimrey D. Newlin and Edward T. Lovett, pp. 71-86.

Procurement Administration Lead Time (PALT) during the pre-award phase is a major part of total Procurement Lead Time (also called PALT). PALT is a primary determinate of when the user will receive his materials; it PALT has traditionally been used as a measure of efficiency.

Previous research has almost exclusively focused on PALT reduction rather than how to better manage it. This article examines traditional ideas about PALT and the current reality in order to develop realistic PALT management and performance criteria. The authors' analysis includes identification of time segments of PALT where management attention should be concentrated, elimination of bottlenecks causing PALT delays, variables that affect PALT, PALT targets and standards, and management analysis of PALT data.

PRACTICAL, NORMATIVE, EMPIRICAL, INDUCTIVE [23]

"A Conceptual Model for Evaluating Contractor Management During Source Selection," Theodore Helman and Robert L. Taylor, pp. 88-107.

Source selection is ideally based on a set of objective, rigorous, structured standards regarding technical performance, schedule and cost objectives. The authors suggest that the same rigor should be applied to contractor management. Their thorough review of the literature indicated there was no structured technique for this important evaluation.

This article suggests a conceptual model for evaluating a contractor's management potential. The model consists of three major functional areas of management: planning, organizing, and controlling. It includes a number of factors against which an evaluator asks questions or responds to a series of statements. A judgement is made by expert evaluators who have identified standards in each of these areas -- in effect, they "score" the contractor.

The authors describe the model and how it can be used. Appendices include criteria for evaluating the planning, organizing, controlling potential of the contractor, and a complete evaluation model for point scoring.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [34]

Volume 11, Summer 1977, Number 1

"The Use of Functional Purchase Descriptions for Advertised Procurements," Robert Jackson, pp. 1-12.

The rigidity and costs associated with formal Government specifications may not serve the best interests of the Government; from the standpoint of meeting actual user needs, or achieving lowest ultimate costs. This article suggests a conceptual alternative rigid Government specifications. It advocates the use of functional purchase descriptions and award determination procedures, that require qualitative judgement and user considerations.

The alternative method discussed argues for a new way of looking at formal advertising: product competition, not initial bid price competition, becomes the new standard as the basis for award. This article employs automated data processing (ADP) equipment procurement examples to demonstrate this method. The author concludes that, based on Comptroller

General decisions on related issues, this method is adaptable to Government procurement.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [41]

"Why Dispute...and How," Irwin Newman, pp. 14-21.

This article is intended to help dispel contractor aversion to use of the dispute process. The author notes the disputes clause exists for a reason; he advocates its proper use. He supports his position by discussing reasons for pursuing a dispute. These reasons include: (1) the dispute procedure may be a precondition to any recovery of a claim, (2) disputes permit discovery, (3) disputes are heard by a party not involved in the dispute, and (4) disputes can serve as a delaying mechanism.

This article describes the disputes procedure and the details of the disputes clause. The author concludes that an aggrieved contractor should use the disputes process to vindicate his rights.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [40]

"Recent Developments in Cost Allowability and Cost Accounting Standards," Ken Jackson, pp. 26-39.

This article is presented in two parts. Part I identifies cases, regulations, Cost Accounting Standards (CAS), and related materials; it is an updated reference source, intended as a supplement to earlier research paper on allowable cost ("Allowable Costs," NCMA Journal Vol. 10, Summer, 1978 No. 1). Part II presents extended comments on the Cost Accounting Standards (CAS). The comments are aimed at convincing the reader there are positive and overriding benefits that flow from the work of the CAS Board.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [6]

"Procurement Quality Revisited -- An Alternative Approach to the Procurement Integrated Quality Assurance (PIQUA) System," Georgeanne Roberts, pp. 41-50.

PIQUA was developed by the Directorate of Procurement and Production at Sacramento Air Logistics Center (SM-ALC), Air Force Logistics Command. It was a statistically oriented, efficient means to measure contractual quality.

The Oklahoma City Air Logistics Center (OC-ALC) was confronted with the same (or similar) conditions that led Sm-

ALC to develop PIQUAS. OC-ALC evaluated the pros and cons of PIQUAS and decided to adopt a similar system: OC-ALC dubbed it Program for Improving Contractual Actions (PICA).

This article describes the development and selling of PICA. It discusses the various checklists, statistical analyses, and reviews of the system (included as exhibits). The author concludes with an assessment of PICA; she states managers can now determine if he is sacrificing quality for timeliness, or vice versa.

PRACTICAL, NORMATIVE, EMPIRICAL, DEDUCTIVE

[35]

"OSHA and Its Effect on Government Personnel, Government Property, and Government Contractors," Richard F. Adams and Jack E. Simon, pp. 51-56.

This paper discusses the Occupational Safety and Health Act (OSHACT), Public Law 91-596, and its impact on Government contractors, Government employees, and Government property.

The OSHACT was designed to promulgate and enforce safety and health standards in three industrial categories -- general industry, construction, and maritime. This article discusses OSHACT implementation, rights of jurisdiction, responsibilities of employers, and enforcement.

The authors' evaluation of OSHA notes General Accounting Office (GAO) criticism that the Department of Defense (DoD) is in noncompliance with the Act. They conclude, however, the "growing pains" associated with OSHACT implementation has abated; the benefits of the Act are more widely appreciated, and more positive actions can be expected.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [57]

"Shielding Government Contractor Profits from Tax Confiscation," Gayford L. Hinton, pp. 58-66.

In most cases, the Government contracting activities of a particular company constitute only part of its activities. Commercial opportunities are generally intermingled with Governmental operations, especially when companies seek to diversify and lessen their dependence on unpredictable Government programs. The overall tax posture of a company must be responsive to each of these activities. It is therefore necessary to understand the general tax principles which affect a contractor's activities.

This article identifies and discusses a number of general tax principles. The most important general tax principle relates to the method of income recognition. Other principles discussed relate to inventories, accounting for tangible

capital assets, the Tax Reform Act of 1976, international boycotts, and Domestic International Sales Corporations (DISC's).

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [7]

"A Primer on Cost Accounting Standards," Jack E. Simon, pp. 70-78.

This article presents a general overview of the Cost Accounting Standards (CAS). It does not discuss the specific CAS (with one exception: CAS 414, Cost of Money).

The author describes cost accounting as a display of costs, in a logical sequence, that present a picture to management as to the effectiveness and efficiency of internal operations. The CAS attempt to systemize accepted accounting principles by reducing the ways contractors can identify and record costs, and to require disclosure, where appropriate.

The author describes the background of CAS, how CAS are issued, the applicability of CAS, role of the Administrative Contracting Officer (ACO), and contract adjustments. He concludes Government agencies believe CAS have slowed the procurement process, increased procurement action lead time (PALT), and caused problems with contract funding arrangements.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE []

"An Analysis of Competitive Bidding on BART Contracts," Kenneth M. Gaver and Jerald L. Zimmerman, pp. 80-94.

The purpose of this study is to analyze the competitive bidding on the early construction projects of the San Francisco Bay Area Rapid Transit (BART) District. The authors develop an analytical model appropriate for the study. They use it to derive a number of propositions concerning the bidding behavior of the participating contractors. They then statistically test the propositions, utilizing data pertaining to 77 BART construction projects. The results of the analysis showed that of the six propositions, none could be rejected.

PRACTICAL, POSITIVE, EMPIRICAL, INDUCTIVE [30]

**"Procurements and Renegotiation: An Ambivalent Relationship,"
George Lenches, pp. 96-119.**

This article reviews the history of renegotiation, including its conceptual development and use as a Government tool. Much of the history of renegotiation is presented as excerpts from Governmental proceedings, including congressional hearings and Renegotiation (or Price Adjustment) Board memoranda. The author suggests a historical review indicates there is no precise definition of exactly what renegotiation is; some use the term to mean "recovery of excess profits."

The author concludes that renegotiation should be adjudged a separate, independent, policy tool of the Government. It is meant to ensure the precepts of a free competitive economy remain operative in Government purchasing. Conceptually, renegotiation is as applicable in peacetime as it is in wartime.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[40]

Volume 11, Winter 1977-1978, Number 2

**"Facilities Investment and Defense Contractor Profits,"
William C. Letzkus, pp. 1-13.**

On 1 October, 1976, the Department of Defense (DoD) significantly revised its profit and pricing policy for negotiated defense contracts. The revised policy, called "Profit '76," is intended to stimulate defense contractor capital investment in modern facilities and equipment, for more efficient and economical performance.

The purpose of this article is not to question whether these policy changes motivate contractor investment. Its purpose is to examine how these changes can influence the amount of profit earned by DoD contractors. Prior to examining various levels of facilities investment and the offset of the cost of money factor, the author discusses the provisions of the new policy. He also presents an overview of the derivation of contract facilities capital employed, the imputed contract facilities capital cost of money, and the profit objective for facilities investment.

The author concludes that as the ratio of facilities capital employed to allowable contract costs increases, profits also increase. However, he also demonstrates that

total profits attainable under the new policy, may well be less than profits attainable under the old policy.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[7]

"Disclosure of Evaluation Factors and Their Relative Weights: A Continuing Procurement Problem," Dominic A. Femino, Jr., and Lawrence M. Smail, pp. 15-23.

This article describes the persistent conflict between Government agencies and Industry/Comptroller General (CG), regarding the disclosure of evaluation factors and weights in solicitations. Agencies are reluctant to disclose factors and weights, since disclosure of such information would diminish the scope of the agency's discretionary authority. Industry has argued that such disclosure is necessary for effective competition. The CG has reportedly echoed the view of Industry. The authors trace the history of this conflict back to the early 1960's.

They conclude there is no valid reason for the regulatory prohibition against the disclosure of evaluation factors and weights. They believe the elimination of this rule would greatly simplify the evaluation process, and significantly improve the quality and effectiveness of competition.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[34]

"An Analysis of Accounting Issues Involved in the Decision of the ASBCA in The Boeing Company, ASBCA No. 19224 77-1 BCA 12371," Michael S. Katz, pp. 26-47.

The purpose of this paper is to discuss and clarify a number of key accounting issues, brought to light in an appeal of the Boeing Company before the ASBCA. The appeal concerned Boeing's allocation of Washington state and local tax costs to its Seattle-area segments. This article discusses the issues both in terms of general accounting principles, and in relation to the tax costs and Boeing's specific circumstances.

The author addresses five specific issue areas. The areas are: (1) fundamental cost allocation criteria, (2) specific identification of costs, (3) pooling of homogenous non-specifically identified costs (4) hierarchy of preferred allocation techniques, and (5) final cost objectives. Each issue area is introduced, relevant case decisions are presented, the issue is discussed and, finally, summarized.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [5]

"The Release: Some Insights on its Use in Government Contracts," Anthony P. Ingrao, pp. 49-59.

This article presents a detailed overview of releases. A release is broadly defined as a writing either under seal, or supported by sufficient consideration, that states that one or more of the maker's contractual rights or discharged.

This article explores the use of the release in Government contracts. It offers detailed insights into its use, based on decisions of the Courts and Contract Appeals Boards. Topics covered in this article include contracts requiring releases, qualified and unqualified releases, conduct subsequent to release, mutual releases, and defenses. It also discusses special circumstances that might be present, including fraud, duress and coercion, misrepresentation, and mutual mistake.

The author concludes the release is an efficient devise available to discharge rights and obligations under a Government contract. It is a formidable device that can irrevocably discharge rights and duties beyond the intentions of the party concerned. Accordingly, care and caution should be exercised prior to executing a release under a Government contract.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [17]

"Requirements for Accounting and Related Policies and Procedures in Government Procurement Regulations," Kenneth M. Jackson and Richard M. Lucash, pp. 63-72.

One purpose of this article is to identify regulatory requirements for contractor establishment of accounting, budgeting, and estimating policies and procedures. A second purpose is to assess the impact of these requirements on the procurement system.

This article describes the essential elements a properly designed accounting system, including: (1) its organization, (2) the relationship of costs to cost objectives, and (3) cost allowability. This article then describes the principal elements of an acceptable estimating system and an acceptable budgeting system. It concludes with a discussion of changes in policies and procedures.

In evaluating Government requirements for these various systems, the authors conclude that a major problem is the requirements are geared to ideal systems for large contractors; not practical systems that allow for differences among companies.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[7]

"Crossing a New Frontier in the Next Five Years," James R. Brennan, pp. 75-87.

This article discusses the emergence of modern cost data methodologies for use in the areas of cost estimating, negotiation, and contract cost management. Current cost data methodologies are considered archaic; they are being replaced by methods utilizing computers, Work Breakdown Structures (WBS), and lower level detail data.

Emphasis is directed towards tailoring an existing post-award cost management system (Cost/Schedule Control System Criteria (C/SCSC)), for pre-award applications. This would allow for continuity between pre- and post-award cost data. The author discusses how such a method can be used in negotiations, and the benefits anticipated from its use.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [48]

"A Proposed Definition and Taxonomy for Procurement Research in the DoD," Martin D. Martin, and Gerald R. J. Heuer, John C. Kingston, and Eddie L. Williams, pp. 89-104.

Research has been viewed by many in the procurement field as a key to alleviating both existing and future procurement problems. The purpose of this article is to clearly define the term "procurement research;" and classify its characteristics into a model (taxonomy) to provide more efficient use of resources.

This article describes the methodology, findings, and conclusions of the research effort. The basis of the research was a literature review and personal interviews. The result was a precise definition of "procurement research," and a taxonomy designed to cover all possible areas of procurement research.

THEORETICAL, NORMATIVE, EMPIRICAL, DEDUCTIVE [23]

"Impact of Socio-Economic Programs on Military Procurement Cost -- A Survey of Military Research," Daniel L. Babcock and Ray E. Fellows, pp. 106-111.

A variety of socio-economic programs are imposed on defense procurement by legislative and administrative edict; this ensures part of the defense dollar achieves social ends. The cost impact of these programs has been pursued in a variety of theses and reports. This article represents a summary of this research. Attention has been paid to the effects of the Davis-Bacon Act, the Service Contract Act, the

Buy American Act, and the Small Business Act Section 8(a) (Minority Business Enterprise).

The authors do not attempt to justify the programs. Their survey of the research leads them to conclude no one clearly understands the impact of these programs.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [57]

**"Preventative Law for Government Contractors -- Why Not?"
James W. Booth, pp. 117-124.**

This article addresses an overlooked feature of Government contracting -- the timely advice of a competent lawyer. The author advocates preventative law, as a means of avoiding a variety of problems that may be present in the procurement process.

The format of this article is to support this theme by employing real-life cases from the author's experience. By doing so, the author hopes to impart two points. First, lawyers should be viewed as problem preventers, not only problems solvers. Second, a continuing consultation with legal experts is necessary for any concern doing business as a Government prime contractor or subcontractor.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [23]

"The Effect of Government Breach of Contract Prior to Termination for Convenience or Default," B. Alan Dickson, pp. 125-128.

This article discusses the element of timeliness, and the Government's ability to avoid being sued for breach of contract by a contractor. The author suggests that many of the peculiarities of Government contracting arise because of the Government's desire to avoid liability for anticipatory profits, to keep the work going, and to contain disputes within the agencies and boards. The desires are present (in varying degrees) when the Government terminates for convenience or default. Therefore, the Government is likely to terminate a contract when confronted with being sued for breach of contract.

This article discusses answers to the question: Can the Government get away with this? The answer is probably yes, if the contractor does not sue for breach prior to the Government terminating the contract.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [22]

"Logistic Support Cost Commitments for Life Cycle Cost Reduction," Dwight E. Collins, pp. 1-17.

This article describes a new contractual technique, the Logistic Support Cost Commitment (LSCC), which has been used in recent procurements to communicate Department of Defense (DoD) life cycle cost goals to the contractor. The technique evolved out of a need for broadening the Design to Cost (DTC) concept to encompass not only development and production costs, but also operating and support costs.

This article summarizes results of recent research into the incentives communicated to the contractor by the LSCC and the risks associated with its implementation. The author concludes the LSCC is an innovative contracting technique that embodies the appealing concept of a macro target to summarize aggregate costs and transmit multiple incentives to the contractor. However, due to limited use to date, its effectiveness as a contracting and management tool requires continued evaluation.

PRACTICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[46]

"Towards Detente in the Navy's Cold War with American Shipbuilders," William Barton, Jr., pp. 23-40.

This article discusses the causes underlying the badly deteriorated business relations between the Navy and commercial shipyards (in the 7-8 years preceding this article). The central cause of this problem has been claims for equitable adjustment.

Shipbuilding claims are not new. The present situation has escalated to the point U.S. shipbuilding ability is threatened. Congressional concern was great enough to require the Department of Defense (DoD) and Navy officials to take corrective action.

The action intended to be taken by DoD/Navy was to use "extraordinary contractual relief" authorized under Public Law 85-804. This plan met with failure; other solutions are being sought.

The author concludes that shipbuilding was once accomplished on a relatively informal basis with an element of trust on both sides. It is now characterized as guarded and adversarial.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[40]

"Sequential Research Needs in the Evolving Discipline of Purchasing," Joseph L. Hood and Daniel E. Stayer, pp. 44-50.

The authors suggest procurement is a field of practice that proceeds over time according to a determined sequence of phases of development. To assist research in the procurement field and reduce the criticism that procurement research is not sufficiently broad, the authors have developed a theoretical construct of sequential research consisting of six developmental phases.

Each phase is described in detail in terms of the kinds of questions or issues addressed, the different types of research activity in each phase, and examples of individual research within each phase that has already been performed.

The authors conclude that by focusing research activities on the most pressing knowledge needs and avoiding premature commitments, management can set the stage for orderly improvement.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [23]

"Due Process and Equal Employment Opportunity in Federal Employment," D.W. Farrell, pp. 52-66.

This article is a detailed examination of the 1978 changes to the Civil Service Commission (CSC) administrative proceedings. Under the proceedings, one Government employee (the complainant) could charge another Government employee (the alleged discriminating official (ADO)), with discrimination in violation of the various civil rights statutes, regulations, and executive orders.

The changes were made to clearly define and enhance the rights of the ADO. Prior to the changes there were serious doubts as to the fairness of the proceedings, and the ADO's access to due process. This article examines the proceedings, before and after revision, primarily in a legal context that draws heavily on prior court decisions. The author concludes the 1978 changes fall far short of meeting the constitutional imperative of due process. As a result, the administrative proceeding is in violation of the ADO's rights.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[57]

"The Unheard-Of Standard Set of Subcontract Terms and Conditions -- As Easy as Pumpkin Pie," Norman P. Singer, pp. 70-76.

This article is a critical assessment of a source of unnecessary waste in procurement. The problem is a requirement

for a subcontract administrator to: (1) read the prime contractor's proposed subcontract terms and conditions, and (2) take exception to those terms and conditions he believes is necessary to protect his interest in the proposed subcontract.

The author uses apparently conservative figures to demonstrate that this waste is unnecessary and amounts to millions of dollars: primarily in man-hours necessary to read and modify terms and conditions. He suggests a simple-five step method to correct this wasteful process.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC
[60]

"An Analysis of the Revised Rate Structure for Civilian Employee Benefits Included in OMB A-76 Cost Comparisons," Chester L. Rees, Jr., pp. 77-96.

This article describes an investigation to determine the extent to which recent cost comparisons will be altered by application of revised civilian employee benefit rates. The probable effect of the revised rates on future cost comparisons is also determined.

The relevant cost comparisons are the cost of commercial performance vs. Government in-house performance. This comparison is mandated by OMB A-76. OMB A-76 considers the procurement of a product or service from a commercial source that results in a higher cost to the Government to be an exception to Federal procurement policy (it is Federal procurement policy to rely on the private sector for goods and services). This article describes the researchers hypothesis, methodology and analysis. After applying the revised rates to 43 cost comparisons, the author concludes there would have been a significant number of reversals (23%) in favor of contracting out.

THEORETICAL, NORMATIVE, EMPIRICAL, DEDUCTIVE
[46]

"A Portfolio Approach to Systems Acquisition," Felix M. Fabian, Jr., and Raymond E. Franck, Jr., pp. 97-112.

This article suggests an approach to major weapon systems acquisition that deals more rationally with weapon system selection, mixed procurement criteria, and versatility planning. The authors reason currently popular models (constrained optimization models) for making acquisition decisions are not suitable for versatility planning, or adequate for analyzing mixed procurements.

The approach recommended in this article borrows heavily from portfolio theory. This theory deals explicitly with optimal mixes (portfolios) of risky assets. In this approach to systems acquisition, weapon systems are substituted for assets. The authors first examine the limitations of constrained optimization models, then describe the Portfolio Theory Approach (PTA). Statistical arguments are supported by an illustration, and possible applications are discussed.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[50]

Volume 12, Second Quarter 1978, Number 2

"A Critical Analysis of the Government's Subcontract Termination Clause: ASPR 8-706 in the Light of Day," Norman P. Singer, Donald G. Gavin, and Allan H. Goodman, pp. 1-13.

This article is a critical description of Armed Services Procurement Regulation (ASPR) 8-706, entitled "Subcontract Termination Clause." The regulation sets forth a termination clause (suggested by the Government) for use in fixed price contracts.

The authors note the clause may work in the best interest of the Government. However, since the Government is never a party to a subcontract, the clause should not even be suggested. The authors conclude the suggested clause is poorly conceived, inequitable, unrealistic, and not in the best interests of either the prime contractor or the subcontractor. They suggest a simple clause that might better serve the interests of the parties to the subcontract -- the prime contractor and the subcontractor.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[60]

"Changing ASPR to DAR: Do Benefits Outweigh Costs?," Douglas L. Sanders, pp. 21-25.

This article is a critical assessment of the need to change the Armed Services Procurement Regulations (ASPR) to the Defense Acquisition Regulation (DAR). The concern of some Government and Industry executives is there will be adverse effects from what appears to be a simple name change.

This article describes the arguments for and against the change. It also defines several key concepts referred to in the regulations, including "Acquisition Management" and "Contract Administration."

The author concludes most people are in agreement with the Defense Department's efforts to emphasize acquisition management, via the promulgation of new policies and regulations. However, most people disagree with the proposed name change, an observation that leads the author to conclude the Pentagon used the wrong approach in implementing these changes.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [25]

"The Use of Firm Fixed Price Contracts for R & D Study Contracts," Thomas G. Mancuso, pp. 27-31.

The firm fixed price (FFP) contract has often been utilized by the Government for research and development (R & D) study contracts. Typical objections to the use of FFP contracts for R & D studies, as well as the conditions under which the FFP contract is authorized, are discussed.

Government objections to the use of the FFP include the risk of not getting what was requested, limited enforceable rights, and the inability to specifically define contractor obligations. Contractor objections to the use of the FFP include the impossibility of performance, miscalculation of cost and time, and the likelihood of disputes. The author suggests the successful use of FFP contracts depends on a clearly defined statement of work (SOW), and a request for proposal (RFP) that conveys the Government's intention in clear language.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [33]

"Funding Implications of Cost Accounting Standards." Jack E. Simon, pp. 33-36.

This article is intended to provide financial managers involved in the budget and funding process with insight into the internal workings of Cost Accounting Standards (CAS). This understanding is necessary, since the constraints imposed on budget managers by the CAS program can be disruptive to existing funding methodology. The difficulties that arise in funding for CAS program grow out of the method of introducing new standards, the nature of treating voluntary changes to accounting practices, and the affect of enforcing noncompliance actions on contractors.

The author concludes the implementation costs associated with CAS are significant. He notes the administrative and implementation costs incurred by contractors can be passed along to the Government any time during the life cycle

performance of a contract; the Government's obligation to fund these costs is total.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [6]

"An Excursus on Researching Defense Procurement," Richard S. Sapp, pp. 37-40.

This article is written as a guide for those contemplating performing research in defense procurement. The author prepares the future researcher by observing there is a lack of open literature and published data on procurement matters.

This article separates Defense research into two broad groups: external research and internal research. "External" research is typically performed under contract to the Department of Defense (DoD) by non-profit activities, or advisory companies such as RAND Corporation. "Internal" research is conducted by DoD, or the service branch. Most procurement information comes from other sources, including the texts of addresses by prominent Government and Industry officials, Congress, and Industry.

The author concludes that if procurement research is going to achieve its desired objectives, it must have sponsorship of sufficient authority. If obstructions to the data-gathering process occur, proper authority must be used to remove them.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [70]

"DoD Procurement: The State of the Art and Recommendations," Charles W. Sherrer and Brian P. Morrison, pp. 42-49.

This article discusses two areas of Department of Defense (DoD) procurement that are ripe for improvement: (1) specialized Governmental accounting, and (2) the temporary assignment of accounting professors from leading universities.

The authors note U.S. Civil Service Classification Standards for attorneys are structured to allow specialization by function and subject matter. They suggest accountants should be similarly specialized by managerial and financial accounting expertise. The Intergovernmental Personnel Act would allow highly qualified accountants from the Federal Agencies to "switch" jobs with willing accounting professors, for periods of up to two years.

the authors conclude there are many benefits to these improvements, and they are achievable at little or no cost.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC
[24]

"Government Patent and Technical Data Requirements and the Small Contractor -- Does He Really Understand His Rights?" James A. Black, pp. 54-58.

The author observes Government procurement regulations are usually overly complex, especially in the area of rights in patents, data and copyrights. Regulation comprehension and compliance is a formidable task, even for well staffed corporations and Government agencies; it is nearly an insurmountable task for the average small business.

This article discusses the regulatory barriers confronting the small businessman. The author first discusses key statutes that address patents, data, and copyrights. Next, he discusses differences and similarities in various Government agencies' regulations regarding patents, data, and copyrights.

The author concludes the small businessman may be unaware of the alternatives available to him under the regulations. He may believe he can not comply with the requirements, and elects not to contract with the Government. This is unfortunate, since the small businessman is often the one who delivers the solution to many difficult problems.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [45]

"The Boycott -- A New Major Consideration in International Business Transactions," Robert J. Eveld, pp. 59-63.

This article addresses the subject of economic boycotts. It examines the Arab boycott of Israel in the light of international law, and the current state of the law in the U.S. The purpose of this article is to provide guidance to those involved in international commerce who wish to maximize commerce, without violating the applicable law.

The author first provides a historical account of the emergence of economic boycotts. The focus then shifts to the U.S. Department of Commerce, the reporting requirements of Export Administration Regulations, and penalties for violations.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [63]

"A Case of Neglect: The Management of Government Property," Jack E. Simon, pp. 64-70.

This article addresses a problem of great importance -- the management of contractor-held Government property. The objective of this article is to expose the weaknesses, and awaken top management, to the causes of the problem. The author's intent is to motivate remedial action.

The causes of the problem can be traced to: (1) vulnerable areas of cost occurrence related to the property function, and (2) the personnel profile of the people responsible for protecting the Government's interest when property is provided to Industry. This article concludes with the author's "bottom line" assessment of the Government Property "business," and remedial steps to be taken.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [64]

"Management By Objectives: Contractor Employment Compliance,"
Rosemary E. Howard, pp. 72-81.

The purpose of this article is to demonstrate the applicability of Management by Objectives (MBO) to the Contractor Employment Compliance (CEC) function of the Department of Defense (DoD), and how its results can be used to support a newer concept: zero-base budgeting.

The author describes the background of the CEC program; it was designed to ensure contractor compliance with equal employment opportunity requirements. Application of the MBO process to the CEC program goal of equal opportunity in employment is also discussed.

The author concludes that MBO is being applied usefully to the CEC program, and should be applied to other compliance agencies of the Federal Government.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [57]

"The Procurement and Management of a Government Owned/Contractor Operated (GOCO) Electronic Repair Facility,"
O.M. Sawyer, Jr., pp. 83-91.

This article describes how an unsolicited proposal from an 8(a) program company, resulted in contractor management of a Government facility. Confronted with a civil service manning shortfall, the future of the Electronic Maintenance Center (EMC) recently established by NAVELEX Portsmouth, was very much in doubt.

The author discusses the skepticism surrounding the proposal, the cost breakdown and negotiations of the eventual contract, performance results, and lessons learned in the process. The author concludes the principles behind the 8(a) program are solid, and, in this particular case, the 8(a) contract can be a big success.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [23]

"1977/78 Professional Survey Report," A Service of the National Contract Management Association, pp. 92-107.

This article describes the results of a nationwide questionnaire survey conducted by the NCMA. A data summary of the questions and responses is presented as Table I. There were 475 respondents to the survey. General interpretative comments are made with regard to personal data, education, employment and salary, and organizational structure. The data presented generally lends itself to objective analysis.

PROFESSIONAL, POSITIVE, EMPIRICAL, INDUCTIVE [70]

Volume 12, Third Quarter, September 1978, Number 3

"The Freedom of Information Act and Federal Acquisition: The Proper Balancing of Competing Interests," Dominic A. Femino and Lawrence M. Smail, pp. 1-9.

The Freedom of Information Act (FOIA) of 1967 was enacted to eliminate the undue secrecy exercised under the Administrative Procedure Act (APA). Under FOIA, any person has the right to request and receive information in the possession of the Federal executive branch, subject to certain exemptions. The focus of this article is "Exemption Four" of the FOIA. It exempts from mandatory disclosure, certain financial and commercial information submitted to the Federal Government.

The authors discuss FOIA, particularly its use as a device for competitive discovery. The concern of Industry is that FOIA can be used by competitors to access highly sensitive information (for example, proprietary innovations or financial capabilities) revealed to the Government in proposal.

The authors examine this issue, and its impact on the acquisition process. Actual court decisions are used to support their conclusion that unless remedial actions are taken, the Government's ability to acquire innovative research will be jeopardized.

THEORETICAL, POSITIVE, NON-EMPIRICAL INDUCTIVE [25]

"Source Selection Under the Model Procurement Code," Eldon H. Crowell and John W. Chierichella, pp. 13-20.

This article discusses Article 3 of the Tentative Draft of the proposed Model Procurement Code (MPC), under consideration by the American Bar Association. The authors are concerned that Article 3 contains a measure of ambiguity that should not be tolerated in a "model" code.

The Draft has no requirement for the use of objective, measurable criteria in calculating the evaluated bid price under competitive sealed bidding -- a method of source selection that fosters increased efficiency and confidence in public purchasing. Instead, the Draft introduces into the sealed bid process subjective quality considerations that are commonly associated with competitive negotiations. The authors conclude this is negotiated procurement under the guise of procurement by sealed bidding -- improper, since the higher level oversight and review required for negotiated contracts would be avoided.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [34]

"VINSON-TRAMMELL -- An Anachronism," James A. Hermann and William R. Tolley, pp. 22-31.

The Vinson-Trammell Naval Parity Act of 1934 provided for the modernization and enlargements of the U.S. Navy. The Act was amended several times because Congress, wary of profiteering, felt it necessary to control profits. To accomplish this, profits were limited to a specified percentage of cost.

This article discusses the inherent shortcoming of the profit limitation, and the Act's provision calling for contract by contract implementation. Instead of contributing to the effectiveness and equity of the procurement process, the Act hindered it. The authors note that in this environment, profit maximization was achieved through cost maximization, rather than productivity and cost reduction.

The authors characterize the Act as unnecessary, arbitrary, uneconomical, and not in the best interest of the taxpayer. The Act was suspended (but not repealed) in the early 1940's; technology, the economy, and the sophistication of the defense procurement system justify its repeal.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE [25]

"The Adventures of the Nugatory Legend," Jeffrey L. Michelman, pp. 32-38.

This article involves the fictional sleuth Sherlock Holmes and his sidekick, Dr. Watson. In this adventure, Holmes' client is confounded by the Rights in Technical Data and Computer Software (DAR 7-104.9a(ii)) clause of his Government contract.

Through Holmes's careful explanation of his solution to the case, this article communicates several of the basic concepts and regulatory requirements relating to data rights, patents, proprietary rights and unauthorized markings.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [45]

"Procurement Salad or Ten Icebergs of Government Procurement," Dale E. McNabb, pp. 39-53.

This article identifies and discusses nine significant Government procurement problem areas, the author believes have been largely unrecognized or unaddressed in the past. A tenth problem area joins the previously discussed problems into a central theme: How could these problems go largely unrecognized, at the same time they are degrading the integrity of the procurement system?

the author describes each problem, then outlines a possible solution. A discussion of the problem/solution follows. A sample of the problems discussed include "Meaningful Non-Discussion with Contractors," and "The New CO -- A Decision Maker by Position but a Paper Shuffler by Experience and Training."

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [24]

"Contracts for Consultants," Robert M. Cooper, pp. 54-59.

This article is intended to be an overview of consulting services contracts. Consulting contracts represent a minor part Department of Defense (DoD) and Federal procurement. The author observes consulting contracts are significant beyond their indeterminate requirements, sometimes controversial nature, and recent presidential interest in reducing their numbers.

This article discusses the basic authority for procuring consultant services, Public Law 600, and the regulations that implement the law. Procurement considerations are discussed, including whether the services required are: (1) personal in

nature and (2) sole source requirements. Cost and contract considerations are also discussed.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [67]

"Guidelines for Effective Consulting Agreements for Defense Contractors," Robert W. Mungovan, pp. 62-63.

This article describes a recommended format for consulting agreements. Since existing regulations do not specify a required format, the contracting activity can tailor the form and content of a consulting agreement to their particular preferences.

The recommended format contains two parts. Part I is "Special Provisions;" it includes sub-parts titled "Deliverable items and Services to be Performed," and "Consideration." Part II is "General Provisions;" it includes sub-parts titled "Inventions," "Patents," "Independent Contractor," and "Warranty."

The author notes specific wording of the agreement is negotiable; however, the agreement should spell out administrative arrangements, such as the names of the principals involved, the rate and method of payment, and the statement of work.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[67]

"Losses Resulting from Exercise of Quantity Options in Government Defense Contracts -- Avenues of Recoupment," Robert H. Rumizen, pp. 64-80.

The prescribed option clauses in the Defense Acquisition Regulation (DAR) obligate the contractor to furnish the Government with additional quantities (as specified in the contract) at the contract stated price. He must do so whenever the Government exercises its right to order increased quantities (by written notice to the contractor) in a timely manner.

This article discusses options as a contractual undertaking, in light of Armed Services Board of Contract Appeals (ASBCA) rulings, and in terms of Public Law 85-804, the Extraordinary Relief Statute. Two hypothetical cases for option relief are presented and criticized.

The author notes that contract options place a heavy risk burden on the contractor, primarily as a result of pricing an option that might not be demanded until well in the future. However, he also notes that under Public Law 85-804, a contractor might seek relief from providing option quantities at contract prices (especially during periods of high

inflation). The author concludes the potential for relief has the effect of shifting the burden of risk from the contractor to the Government.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[21]

"The Future is Now," Cary Cohen, pp. 83-88.

This article discusses the emergence of the "Social Partner" as the third party to the contract (the first and second parties being the "buyer" and "seller"). The Social Partner is described as the various concerns of environmental, consumer, and other special interest groups.

The agents of the Social Partner are "intervenors," groups who are allowed to express opinion and debate the merits of a particular project/procurement. Permit and licensing processes are examples of ways intervenors affect the procurement process.

The author does not argue the merits and/or drawbacks of the Social Partner. He notes the issues raised by intervenors (economic impact, environmental considerations and aesthetics) must stand or fall on their own merits. The authors purpose in writing this article is to emphasize this area will require more attention, more resources, and more thought. If this requirement is not met, progress may be increasingly difficult to achieve.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE

[57]

"The Scope of the Comptroller General's Right to Review Contractor's Books and Records Under the GAO Audit Clause," D. Michael Fitzhugh, pp. 89-94.

This article discusses court decisions that have interpreted the statutory language defining the audit rights of the Comptroller General (CG). These rights arise from Congressional amendments to statutes dealing with the procurement of goods and services by the Federal Government. They give the CG the right to examine any books, documents, or records of the contractor that directly pertain to a Government contract.

The author concludes there are now two conflicting interpretations of the scope of the CG's right to examine contractor's books and records. As a result, the state of the law in this area is confused.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[47]

"The Functional Value of Uncertainty in the Procurement Process," Charles W.N. Thompson, pp. 1-11.

Uncertainty is discussed in this article in its common sense, everyday meaning of how sure one is about something. Uncertainty is present throughout the procurement process. A variety of approaches (parallel development, procurement breakdown, specifications and standards, life cycle costing) have been developed to deal with it.

This article describes how uncertainty, when identified and analyzed, can be a useful basis for developing solutions that minimize its effect. To aid in this process, and to supplement verbal and quantitative models, the use of graphical models is described. Examples are presented to illustrate the usefulness of explicit recognition of the characteristics of the specific uncertainty presented in a procurement situation.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [24]

"The Effectiveness of Incentive Contracts: What Research Tells Us," Richard F. DeMong, pp. 12-20.

This article represents a distillation of completed research projects that studied Department of Defense (DoD) incentive contracts. The purpose of this distillation process was to answer three questions regarding incentive contracts: Are these contracts effective? Are these contracts efficient? Can Government use of these contracts be enhanced?

The author discusses the findings of the research in six specific topic areas: incentives as motivators, incentives as a means to reduce costs, incentives for better scheduling, incentives for better performance, award fees, and improving the use of incentives and future research needed. The author concludes this article was designed as a means of locating answers, rather than the answer itself.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [33]

"Training Developments: A Means of Influencing Life Cycle Costs," Troy V. Caver, pp. 23-33.

This article examines the benefits of training developments that are the result of integrating technical documentation and training techniques, into a composite package. By examining the results of studies and experiments

concerning new training development concepts, the author tries to determine how these development concepts can achieve lower life cycle costs.

The author concludes that the studies conducted provide the means for satisfying service user needs for enhanced technical and training documentation. They can also achieve lower life cycle costs. His concern, however, is that as long as Project/Program Managers emphasize Unit Production Cost, instead of Life Cycle Cost, these study results will be difficult to implement.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[27]

"An Evaluation of the Definition, Classification and Structure of Procurement Research in the DoD," Martin D. Martin, Gerald R. J. Heuer, John C. Kingston, and Eddie L. Williams, pp. 35-58.

This article describes an extensive research effort to clearly define "procurement research." The authors note that even though there is a general consensus as to the importance of research on the procurement process, procurement research as a discipline has not been clearly defined in existing literature and practice.

The objectives of the study were to: (1) define procurement research, (2) classify procurement research efforts and functions, and (3) suggest a detailed algorithm for use in deciding if an effort is procurement research. A literature review (114 articles from the "Proceedings" of five Department of Defense (DoD) Procurement Research Symposia) ultimately provided the basis for accomplishing these goals.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[23]

"A Statement of Unsolicited Descriptive Literature in Formally Advertised Procurements," Henry W. Smith, pp. 60-65.

This article addresses a problem encountered when unsolicited descriptive literature is provided in response to a formally advertised Invitation for Bids (IFB). The question is whether such literature makes a bidder responsive, or unresponsive.

The author discusses how two rules are applied to this issue of responsiveness. The "regulatory" rule may require a contracting officer to accept a hopelessly ambiguous or qualified offer. The "statutory" rule requires rejection of such bids.

The author concludes that the "statutory" rule is the better approach. He recommends that agencies construct IFB's

to clearly state that submission of unsolicited descriptive literature may result in bid rejections.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [30]

"President Moves Rapidly to Apply Inflation Controls to Government Contractors," David M.F. Lambert, pp. 69-73.

This article discusses the background, content, and potential impact of Executive Order No. 12092, entitled "Prohibition Against Inflationary Procurement Practices." It also examines the issuance of the Office of Federal Procurement Policy (OFPP) proposed rules implementing the Order. The central point of the OFPP rules is a contractor self-certification system, under which the contractor certifies that he is in compliance with the new wage and price standards.

The author discusses the proposed OFPP rules, certification requirements, non-compliance issues, and penalties for non-compliance. He notes the most significant aspect of the proposed rule is there is no apparent form of due process for contractors in non-compliance. He concludes the OFPP must address this (and other) problems if the proposed rules are to be effective.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [25]

"The Army Procures a Flying Machine: A Backward Glance," James H. Powell, pp. 75-82.

This article describes the 1908 U.S. Army Signal Corps procurement of an airplane from the Wright brothers. It discusses the early development of the Wright brothers flyer and their frustrating, two-and-one-half year effort to interest the U.S. Government in their patented machine.

Finally, in 1908, the Government responded with an invitation for bids (IFB). The author urges the IFB and resulting contract are worth reviewing, for they represent an expensive state-of-the-art Research and Development (R & D) procurement that was contracted for using the very simplest of agreements.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [33]

**"Indefinite Delivery Time and Material/Labor Hour Contracts,"
Walter Edmond McClelland, pp. 84-91.**

The Indefinite Delivery Time and Material/Labor Hour (IQ/T & M) contract is designed to give the Government flexibility to award a contract for repair, overhaul, or maintenance, when the extent of work required cannot be determined accurately, prior to tearing down and inspecting the equipment. It has been primarily used in sole source situations for specific one-time needs.

This article describes the IQ/T & M contract and identifies numerous problems associated with its use. The author notes that the IQ/T & M contract is void of incentives and rarely audited after award. He concludes that unless the GAO or pertinent procurement regulations clarify its use, the problems described in this article will persist. A detailed check list is included to assist the procurement professional in the management of IQ/T & M contracts.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [33]

"Contractual Arrangements for Life Cycle Costing," M. Robert Seldon, pp. 92-102.

Life Cycle Cost (LCC) is the total of the ownership cost (operating and maintenance costs) and the purchase price, along with the development cost and any disposal costs. The recent trend in Government competitive procurement is to choose the product with the lowest LCC, not just the lowest price.

This article discusses several contractual arrangements that have been used in life cycle costing. The arrangements discussed are: (1) Design to Cost (DTC), (2) Reliability Improvement Warranty, (3) Logistical Support cost Warranty, and (4) LCC Procurement. This article then suggests ground rules that should be considered for measuring costs, defining performance expectations. It also discusses a method for handling contingencies. This article concludes with a discussion of lessons learned, and problems discovered, with the use of these contractual arrangements.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

"Work Density and Its Effect on Ship Construction Cost and Time," Allen H. Magnuson and Robert W. Terry, pp. 1-17.

This article describes a quantitative model designed to predict costs and construction times of new ships. It is not concerned with ship design or design optimization.

The author first reviews the usual estimating procedure used by the shipbuilding industry, including a description of the weights, parameters, and variables which must be considered. The model is then described in detail.

Briefly, the model develops a normalized production curve to represent the drop-off in production as work density effects increase, increasing construction time. Total cost is then predicted as the sum of labor costs (material costs are disregarded since they are fixed) that increase with work density, and indirect costs proportional to construction time. A minimum cost is then associated with an optimum workforce level and construction time.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[46]

"Determining and Forecasting Savings Due to Competition," Ed Lovett and Monte Norton, pp. 18-26.

The need for competition in the Government's procurement process has many advocates, since competition is believed to result in lower costs, improved quality, and adherence to schedules. The objective of the research described in this article is to (1) develop a methodology for estimating savings achieved by competition, and (2) develop a methodology to forecast the net savings expected by introducing competition in the acquisition process. The methodology would then be used to determine if competition saves money.

The estimating methodology is an accounting model, with savings debits and savings credits. It considers nonrecurring and start-up costs, learning, and inflation.

The forecasting methodology consists of three parts: (1) a set of criteria that must be met in order to consider competition, (2) a forecasting model that estimates expected savings, and (3) a competition index of factors that influence competition savings.

The author concludes that competition does save money, and the savings achieved can be accurately estimated.

PRACTICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[30]

"Affordability of Major Systems," F.C.E. Oder, pp. 28-33.

This article discusses the concept of "affordability" in the acquisition of major defense systems. Affordability consists of two elements: (1) acquisition and ownership costs, and (2) budget availability.

DoD Directive 5000.1, "Major Systems Acquisition," will have affordability of a major system determined at each milestone decision point in the acquisition cycle. Additionally, mission element need statement (MENS) approval will minimize gold-plating, and weed out marginal programs.

The author discusses the importance of affordability, and the quantification of system costs in the pre-development phase. He concludes that the affordability concept, when appropriately applied in all phases of the acquisition process, will assist all concerned in deploying adequate systems in support of national security.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [50]

"The Freedom of Information Act: Its Impact on the Contractor's Technical Proposal," Van R. Muhn, pp. 34-41.

This article discusses the Freedom of Information Act (FOIA), and the way it is affecting the amount of state-of-the-art technology contractors are willing to include in their proposal.

FOIA provides anyone the right to request Government-held information. Even though a contractor's technical proposal containing trade secrets is not required to be released under FOIA, it is possible the information may be released. The contractor who submitted the trade secrets in good faith to the Government may be severely affected; loss of competitive advantage is one example.

The author surveyed 18 major defense aerospace contractors and program offices to ascertain the impact of FOIA on proposal submissions. One of several conclusions reached is that some contractors are withholding sensitive technology from their proposals.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE [24]

"The Impact of International Programs on the Acquisition Process," Gregory L. Wagner, pp. 42-48.

The purpose of this article is to provide acquisition officials with background on international program developments and procedural differences to be expected as various programs are implemented. The author first describes the economic and military rationales for international acquisitions. He then describes several Department of Defense (DoD) programs (Mutual Defense Cooperation, Family of Weapons, Dual Production, and Offset Programs).

The impact of these programs on the acquisition manager are discussed, including decisions regarding technological transfer, control of sales, currency transactions, Industry/Government relationships, contract formats, language delays, production problems and marketing concepts.

The author concludes that the philosophy of NATO Rationalization, Standardization and Interoperability (RSI), and its implementation policy, has a completely different effect on the DoD acquisition process than have previous international programs.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [63]

"Influencing the Work of the CASB," Lane K. Anderson, pp. 50-54.

This article was prepared by a Cost Accounting Standards Board (CASB) member to inform contractors how they can influence CASB decisions. The author notes that the CASB directs its efforts and bases its decisions on perceptions of real world cost accounting. It is therefore essential that contractors provide their inputs to the CASB.

The author describes what contractors can do and the environment in which the CASB operates. A detailed description of the research process followed by the CASB is also presented. The author concludes that most contractors do not favor regulations; if they don't like them, fight them, but only through channels that count.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [6]

"Towards Common Concepts of Cost Allocations in Cost Accounting," The Boeing Company, pp. 55-61.

Cost accounting has historically been perceived as an evolving body of principles and practices for identifying, measuring, and allocating costs principles as a managerial aid. The application of these principles and rules allowed for many variations, dependent upon the particular company, product and/or operation. Consequently, cost accounting has lagged behind financial accounting in establishing published, generally accepted and authoritative guidelines.

This article describes research conducted to trace the development of cost accounting principles (through a search and comparison of authorities), and analysis of the concepts and terminology which form the basis for these principles and their application. The purpose of the research was to specifically describe these principles since they have been the focus of conflict and disputes between contractors and Government agencies.

This article addresses two specific areas of concern to the Boeing Company, (1) the allocation of taxes, and (2) the cost of privately developed products.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [5]

"Interpretation of the Phrase "Increase Costs Paid" by the Cost Accounting Standards Board," Roger N. Boyd and Terry L. Albertson, pp. 62-76.

This article suggests that there are serious questions about the validity of the Cost Accounting Standards Board's (CASB) regulations concerning increased costs. The focus of this article is the statutory requirement implemented by means of a clause in all CAS-covered contracts. It requires contractors to return to the United States Government any "increased costs paid" as a result of noncompliance with CAS.

The authors discuss various aspects of the language, intent and results of the regulation. They conclude that there are too many complicated situations to attempt to deal with all of them in a rigid regulation. They recommend that the CASB limit it's regulations to a simple and general definition of "increased costs," one that is fair to all parties and in compliance with statutory requirements. The application of that general policy should then be left to the Government's contracting officers.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [6]

"Cost Benefit Analysis of Standards: An Exploration of Limitations and Possibilities," Henry Briefs, pp. 78-88.

The Cost Accounting Standards Board (CASB) is mandated by Congress to develop standards that accomplish two goals: (1) Uniformity and consistency and (2) good cost accounting. The author notes that these goals may be in conflict with each other. Thus, they involve trade-offs. This article discusses the application of cost-benefit analysis to assist the CASB in making trade-off decisions during Standards development.

This article discusses the character and purpose of cost-benefit analysis, the preference function of the CASB, the implementation costs of Alternative Standards, and the benefits associated with standardization and efficiency.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [6]

"Cost Accounting Standards: Boon or Burden?" Ronald E. Everett, pp. 91-99.

Congress intended to establish Cost Accounting Standards (CAS), developed by the CAS Board (CASB), as a means of reducing the cost of Government contracting. This article examines the effectiveness of the CASB in carrying out its stated purpose: to develop CAS's to achieve uniformity and consistency in the cost accounting principles followed by defense contractors under Federal contracts.

The CASB has supporters (Government agencies) and critics (Industry). Since its creation, the CASB has been surrounded by controversy, primarily over the issue of benefits versus cost. The CASB has claimed numerous benefits and minimal costs, while Industry insists the opposite is true.

The author examines the issue in terms of benefits claimed by the CASB, including consistency, uniformity, and visibility in contractor cost accounting. The author concludes that the sole purpose of the CASB was to save the Government money, and it is time for Congress to determine if this purpose is truly being accomplished.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [6]

"The Industry Viewpoint on Cost Accounting Standards Presented at the Price Waterhouse and Co. Seminar on Government Contracts -- Newport Beach, Calif. 11/29/78," Sy Herman, pp. 101-106.

This article represents the Industry perception of the impact of the Cost Accounting Standards Board (CASB) promulgations and activities. It also addresses some of the more significant issues that concern Industry.

The majority opinion of Industry is that the CASB has tried to accomplish the requirements mandated by Congress. However, the CASB has caused an increase in the complexity of cost accounting practices and systems; this in turn has resulted in a negative impact on Industry.

The issues which concern Industry include the allocation of state and local taxes, the total cost input base, equitable adjustments, and the results of the CAPRI Research Report.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[6]

"The International Government Procurement Code," Ralph J. Capio, pp. 107-111.

Many Governments have procedures that tend to discriminate in favor of domestic sources for Government purchases. The Government Procurement Code (GPC) is intended to discourage discrimination against foreign suppliers.

This article discusses some of the major provisions of the GPC, including scope and coverage, national treatment, specifications, tendering procedures, information and review, and enforcement. Overall, the GPC is a serious effort to diminish the distorting effects of certain non-tariff barriers to trade. The author concludes that the GPC contains much to be applauded.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [63]

"A Statement by the Honorable Lester A Fettig -- Administrator for the Federal Procurement Policy Office of Management and Budget -- Before the Subcommittee on Federal Spending Practices and Open Government, Senate Committee on Government Affairs March 2, 1979," Lester A. Fettig, pp. 113-129.

This article is a statement from the head of the Office of Federal Procurement Policy (OFPP) regarding its performance as of March 2, 1979. The statement discusses the statutory base of OFPP, the Federal Acquisition Regulation (FAR) implementation project, public participation in policy development, reliance on the public private sector for goods

and services, the Federal Acquisition Institute, the Federal Procurement Data System, the Commission of Government Procurement Recommendations, Major Systems Acquisition Policy, small minority businesses, commercial buying practices, standards and specification accomplishments, and other programs.

This article concludes with a discussion of the Heisenberg Principle, acquisition versus procurement, socioeconomic programs, and the scope of OFPP's authority.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [23]

" A Discussion of Nine Clauses Uniquely Suitable for Use in Major Systems Contracting," Harvey J. Gordon, pp.130-144.

This article discusses the evolution, motivation, and logic behind the collective effort of a number of military and civilian acquisition personnel in developing certain contract clauses. These nine contract clauses came into being out of a need for good program management, effective cost control, and timely delivery of hardware which met contract specifications.

The nine clauses address (1) total system performance responsibility (TSPR), (2) restraint of competition, (3) correction of deficiencies, (4) value engineering, (5) option ceiling adjustment, (6) change proposals, (7) incentive award, (8) demonstration milestone, and (9) limitation of Government obligation.

The author's purpose in describing the clauses is to communicate a clear understanding of their purpose, and the manner in which they are meant to operate.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [37]

"OFPP Implements the Contract Disputes Act of 1978," David M. F. Lambert and Cecil R. Morrow, Jr., pp. 145-155.

The Contracts Disputes Act (CDA) went into effect March 1, 1979. Prior to the CDA, the disputes process for Federal contracts was an interesting mix of contract clauses, procuring agency regulations, judicial decisions and statutory coverage, without any comprehensive legislative scheme. The CDA is considered a landmark in the evolution of Federal contract law. This article is a detailed analysis of the impact of the changes made by the CDA.

The authors discuss implementation of the CDA, changes in the role of the Contracting Officer, the Boards of Contract Appeals, and court jurisdictions. Changes are also evaluated in terms of whether they favor the contractor or the Government.

The authors conclude that the law has made changes that are commendable, and changes that are of questionable merit. The absence of informal administrative dispute procedures was considered unfortunate. Overall, the CDA should go far toward modernizing and updating the disputes process.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [40]

"Small Business Set-Asides and Vehicle Rentals," Patrick M. Morris, pp. 161-170.

This article describes how one Federal activity achieved a small business "partial set-aside" in the procurement of motor vehicles. Prior to use of the partial set-aside, the activity had either totally set their requirement aside (unaware that their suppliers were large, not small, businesses), or advertised it on an unrestricted basis (no small business set-aside).

The author describes the partial set-aside procurement process, including basic discussion, requirement statements, solicitation formats, and results. He concludes that the partial set-aside is a viable procurement alternative that enhances the opportunities for small business.

PRACTICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [58]

"Role of Depreciation in Capital Formation," Jack E. Simon, pp. 171-174.

This article discusses how business derives capital for investment, and how asset depreciation contributes to the formation of investment capital.

Capital for investment is accumulated either through retained earnings, sale of stock, or sale of a debt instrument. Depreciation contributes to the formation of investment capital via its income tax savings effect.

The author discusses the effect of Cost Accounting Standards (CAS) on depreciation, and the calculation of cost of capital. Industry opposes many of these approaches; the author concludes that Industry's arguments have merit. Without corrective action, future economic growth (on a national scale) may be jeopardized.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[7]

"Stopping Work and Defective Specifications: Contradictory Duties from Inconsistent Cases," William J. Spriggs and Stephen D. Knight, pp. 176-191.

This article describes two court cases that emphasize contractors working with defective Government-furnished specifications, or working on contracts impossible to perform, are in no-win situations of great uncertainty. The reason for this quandary is the rules expressed in these cases are contradictory and mutually exclusive -- to obey one is to violate the other. In **S.W. Electronics**, a contractor can not make a defective product and charge his customer for it; therefore, the contractor must stop work. In **Switlik**, the contractor must either perform or be in default; therefore, the contractor must perform.

The authors propose a sensible alternative. The contractor should be able to continue performance, stop performance, or pursue other action, provided the contractor has notified the Government of the defect. This shifts the burden of risk to the Government, where it properly belongs.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [40]

Volume 14, Summer 1980, Issue 1

"Small R & D Firms: What Problems are Encountered When Dealing with the Federal Government?," George L. Harris, pp. 1-3.

This article discusses the myriad of problems facing the small Research and Development (R & D) firm in competing for government contracts. Some of these problems include securing funds for capital investment, a lack of accurate and representative source and bidder lists, deficiencies in personnel qualifications and corporate experience, geographic location, and overwhelming administrative burdens.

The author acknowledges the efforts of the Government to assist the small business firm, and the problems associated with breaking up procurements to aid those businesses. He believes these problems can be overcome by the long-term benefits of a more competitive environment. Finally, the author proposes a number of specific actions to be implemented by Government agencies to reduce the problems encountered by small businesses.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [58]

"Liabilities of a Contractor for Damages under a Government Cost Reimbursement Contract -- Part I of a II-Part Article," Richard Kuyath, pp. 4-12.

This article discusses the potential rights of the Government to recovery of damages in the event of contractor non-performance under a cost reimbursement contract. The basic premise is that the Government is not entitled to recovery. There are two theses of this premise.

The first is that a cost reimbursement contract is a "best efforts" agreement. Recovery of damages by the Government would occur only if the contractor failed to exert its "best effort" in meeting contract requirements. The second is that the language of the Termination clauses indicate it is the intent of the Government not to recover in the event of non-performance.

This article examines the first thesis; the second is examined in a follow-on article. In support of his first thesis, the author examines first how regulation and contract clauses view "best efforts." Next, he examines the limited precedent established by Court decisions that involve the issue of contractor liability for damages under cost type contracts.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[36]

"Pricing and Negotiating Productivity," Dorsey Talley, pp. 14-20.

This article discusses the development, implementation, objectives and results of MIL-STD-1567 (USAF), Work Measurement, introduced in 1975. MIL-STD-1567 was developed out of a need for a productivity plan to reduce and control weapon systems hardware costs. The standard was designed to achieve work measurement system discipline that would lead to increased efficiency and improved productivity. It would also direct contractors away from the traditional "actual cost" approach to a "should cost" approach in justifying program costs.

To accomplish this, MIL-STD-1567 utilizes labor standards as inputs to budgeting, estimating, and production planning. It also requires the identification and review of realization factors, as well as the submission of performance reports and variance analysis.

The author concludes that compliance with the standard has resulted in substantial production savings in contracts incorporating MIL-STD-1567; it is a valuable tool for use in pricing and negotiating contractor productivity.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [41]

"The Limits of A-109," Douglas L. Sanders, pp. 22-25.

This article discusses the general requirements of Circular A-109, Major Systems Acquisition, and some of the difficulties which have been, or may be, encountered in its application. The author notes the similarities in the policies and procedures set forth in A-109 and the Planning, Programming and Budgeting System (PPBS), a program which is now defunct in all Federal agencies except for the Defense Department. He observes that some of the problems which led to the demise of PPBS are already evident in the A-109 process.

The author believes that the requirements of A-109 will lead to more effective major systems acquisitions. However, he has demonstrated that there may be major systems acquisitions that are not appropriate for the formal application of A-109.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [25]

"An Approach to Grouping Contractors," Robert F. Williams and Richard C. Brannon, pp. 26-30.

Many Department of Defense (DoD) procurements occur in a competitive environment in which a large number of potential suppliers submit proposals. Prior to making a final source selection, the contracting official often determines the competitive range. This article describes a technique, called cluster analysis, that can be used to determine the group of proposals with a reasonable chance of selection for award.

Cluster analysis avoids the drawbacks of conventional approaches, such as using judgement only (vulnerable to protest) or selection based on one criterion (violates DoD policy and is biased). Cluster analysis is a rigorous, objective, multi-dimensional statistical analysis. The authors discuss several variants of cluster analysis and illustrate its applicability by example.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [34]

"Capital Investment Incentive -- A Method of Underwriting Large Defense Programs," W.E. Livesay, pp. 31-34.

This article uses the B-1 bomber procurement to describe a contract provision called Capital Investment Incentive (CII). The purpose of the clause is to motivate a reluctant contractor to make the capital investment necessary to meet production requirements. This reluctance stems from the risk borne of the necessity to expand huge amounts of capital in an environment characterized by economic, political, and potential threat uncertainty.

CII is an attempt to reduce contractor-borne risk. This is accomplished by a Government promise to buy back designated investment items with the occurrence of a specific event. In the case of the B-1 bomber, President Carter's cancellation of the program was the specific event that activated the provisions of the clause.

CII is a new concept applicable to certain DoD programs. The provision is not generally applicable; it must be tailored to a specific acquisition.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [7]

"Incentive Contracting in the Aerospace Industry -- (Part I)," Arthur J. Nolan, pp. 35-40.

The incentive contract is generally considered a recent innovation. However, as detailed in this article, the incentive contract has been in use in defense procurement since at least World War I.

The author cites numerous contract examples and court cases to trace the history of the incentive contract. Early court decisions took a very negative attitude towards the concept of incentive contracting, stating they offered premiums to the contractor without additional obligations. Later decisions recognized the intent of offering premiums as incentives not requiring additional obligation.

By 1960, only 3.2 percent of all Department of Defense (DoD) contracts (by dollar value) were CPIF contracts. This article concludes with a discussion of the innovative shift towards more incentive contracting with the appointment of Robert McNamara as Secretary of Defense.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [33]

"LAMIS -- A Working, Effective Procurement Management Information System," John D. Voss, pp. 41-47.

This article is a descriptive analysis of the characteristics and capabilities of the Little USAF Acquisition Management Information System (LAMIS). LAMIS is a total contractual workload tracking system. It involves all phases of the contract cycle, from the submission of a purchase request (PR) to contract close-out. As the author notes, the "Little" in LAMIS is misleading. It is a large system that administers more than 3,900 contracts, with over 310 million dollars obligated in FY78.

The author describes in detail the database processing, reports, query capability, tracking network, and workload measurement characteristics of the system. This article concludes with a discussion of future plans for the system, as well as lessons learned during the development and implementation of LAMIS.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [48]

"Handling Government Contract Disputes: Soviet Style," Anthony P. Ingras, pp. 48-55.

This article describes the system of contracts and contract law that exists in the Soviet Union. Particular emphasis is placed on describing the manner in which contractual disputes arise and are resolved.

The author first explains the fundamental concepts of Soviet economic law, and how it is influenced by state ownership and central economic planning. He follows with a description of the nature of Soviet contracts.

The focus of this article is the disputes process. The author discusses the organization, jurisdiction, and procedures of the Arbitrazh, a system of economic courts that decides disputes based on law. Discussions regarding pre-contract disputes, contracts of delivery, and other types of disputes follow.

This article concludes expediency, not the correct application of law, is the basis of the Arbitrazh's decision. The author believes it is a unique legal system with nothing comparable to it in Anglo-American law.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [40]

"Defense Profits Policy -- A Critical Assessment," G.R. Simonson, pp. 57-63.

This article discusses a new defense profits policy, Defense Procurement Circular (DPC) 76-3. The policy is applicable to negotiated defense contracts. Its purpose is to raise producer productivity and reduce defense costs by increasing private capital use. This is achieved by basing profits on production costs and facilities capital employed on a particular contract.

The author concludes that this new policy will be unsuccessful in achieving its objective, primarily because the policy is in conflict from the standpoint of economic theory. He utilizes a Defense Profits Model to support his conclusions, and prescribes the framework for a correct profits policy.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [46]

"A Mathematical Approach to Price Evaluation for Competitive Fixed Price Incentive Contracting," Dudley Glass III, pp. 66-73.

This article describes several mathematical techniques for determining the best "price" among varying offers in a fixed price incentive (FPI) environment. The "price" in a FPI contract is actually a range of possible prices, constrained by several parameters (ceiling price, target price, target profit, and share ratio). The final contract price, determined after performance, will depend on the contractor's actual cost variance from the target cost.

The approaches discussed include evaluation by pre-establishment of pricing parameters, mean price proposed evaluation, and weighted probable price evaluation. The author notes that these approaches do not account for price reasonableness; the focus is solely on the price component of the evaluation criteria. He concludes that by using these techniques, a single "best price" can be determined.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

Volume 14, Winter 1980, Issue 2

"Economic Price Adjustment Provisions in Government Contracting and Suggested Alternatives," David L. Herington and Gerald W. Kalal, pp. 1-7.

Economic Price Adjustment (EPA) provisions in Government contracts began to predominate other cost adjustment methods in the 1970's, when the U.S. economy was plagued by high inflation coincident with the Government's preference for fixed price contracts. This article examines the alternatives to EPA provisions in contracting, including bands, thresholds, abnormal escalation methods with projected indexes and high/low bands, sharing arrangements, and adjustments computed on the lesser of statistics indices or contractor actual rates.

The authors examined Bureau of Labor Statistics data and concludes that price escalation is predictable, and the ability to forward price in lieu of EPA provisions is evident. Forward pricing is preferred by the Government because in combination with fixed price contract types, this results in greater risk sharing by the contractor. The authors also describe several mathematical models for forecasting EPA.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE [37]

"Training in the 80's." Joseph L. Hood," pp. 8-13.

This article is a review of some of the literature supporting trends in the training and development of procurement personnel. These trends include (1) a shift from the knowledge and skill transmission model towards a competency development model, (2) a growing body of knowledge regarding needs, styles, and processes of adult learning, (3) a requirement to provide a more diversified and flexible delivery system for training, and (4) a larger component of the role of managers being concerned with the development of their subordinates.

The author has combined the salient points of the literature reviewed in support of each trend. He concludes that the role of a trainer is shifting from that of prescriber, transmitter, and evaluator toward that of facilitator and resource for self-directed learners.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [23]

"NATO RSI and National Industrial Structures," Edward M. Kaitz, pp. 16-19.

This article discusses NATO RSI policy and the underlying assumption behind the policy. NATO RSI policy, in general terms, is the integration of the United States and European industrial bases, in order to reduce redundancies in military-oriented research and development and production capacity. The underlying assumption is that reducing this excess capacity will reduce the overall cost of developing, designing, and producing complex weapon systems.

The author's approach is to evaluate the pros and cons of this policy. He concludes that the U.S. must define its national interests and the desired scope and content of the industrial structure needed to sustain these interests. Furthermore, these actions should precede, not follow, integration with the military industrial base of our allies.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [3]

"Production Decision Framework: A Dynamic Planning Model," Jack A. Holt, pp. 20-27.

Aggregate planning is concerned with developing a specific course of action for a production system over an extended time period. Related work force and inventory decisions have a significant impact on a firm's performance. For this reason, numerous models have been proposed to solve the aggregate planning problem.

The author notes that the typical manager does not have the time or background to understand a complicated model. The manager is more interested in short-term solutions, not opportunity.

This article describes the Production Decision Framework (PDF) model, a straight-forward algorithm developed for the real-world manager. This article includes the results of a real-world performance test of the model that supports its use in solving the aggregate planning problem.

THEORETICAL, NORMATIVE, EMPIRICAL, DEDUCTIVE [11]

"The Adventure of the Tokyo Round." Jeffrey L. Michelman, pp. 28-32.

This article is a narrative account of a case solved by the fictitious detective Sherlock Holmes. The theme of this article is the Tokyo Round of multilateral trade agreements signed by twenty-three nations April 12, 1979.

One aspect of the agreements is a Government procurement code designed to reduce preference to home industries for purchase of goods for government use. This action would reduce economic protectionism and open up the Government procurement market to worldwide competition.

The author concludes that the U.S. appears committed to the spirit of the Tokyo Round, despite the protests of those who benefit from protectionism.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [63]

"A-109: Its Purpose and Implication in Controlling Costs of Major System Acquisitions," G.A. Smith, pp. 33-39.

This article describes Circular No. A-109, Major Systems Acquisition, and historical developments in the procurement policy which led to its issuance in 1976.

The author's historical starting point is the advent of high technology in the late 1950's. The Department of Defense's (DoD) insatiable appetite for new technology, and lack of a comprehensive approach to systems acquisition, inevitably led to a myriad of problems. The author describes the various efforts taken to correct these problems. A-109 represents the culmination of this effort to control and define the acquisition process.

This article discusses the salient policy directives and cost implications of A-109, including (1) effecting a system approach to the major systems acquisition process, (2) directing top management attention to mission needs and goals, (3) early communications with Congress, (4) early direction of research and development efforts, (5) expanded opportunities for private sector innovation, and (6) avoidance of early commitments to full scale development and production.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [50]

"Incentive Contracting in the Aerospace Industry -- Part II: Late 60's History and CPIF Rationale," Arthur J. Nolan, pp. 41-53.

This article discusses the development of incentive cost type contracting, and offers a comparative analysis of incentive cost type contracts (CPIF) versus fixed cost type contracts (CPFF).

The author begins by listing and reviewing nine reasons for the use of the incentive system. The first two reasons encompass most of the rest. In summary, they state that the CPFF contract tends to result in great inaccuracies in

estimating, and the incentive contract may arrest this tendency.

The author concludes that the incentive system forces greater realism in estimating and negotiating. It also results in better statements of work, reduced overall costs of changes, improved cost efficiency and cost control, and lower overall prices (although profits may be higher).

In summary, the incentive system cannot fail to represent an improvement, simply because of the unsatisfactory record the CPFF contract presents in these areas.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[33]

"Liability of a Contractor for Damages Under a Government Cost Reimbursement Contract (Part II)," Richard Kuyath, pp. 55-62.

The thesis of this article is that it is the intent of the Government not to be entitled to damages resulting from termination for default of a cost reimbursement contract. This is in stark contrast to the Government's intent regarding recovery of damages resulting from termination for default of a fixed price type contract. In this case, there is a considerable penalty against the contractor.

The lack of penalty upon termination for default of cost type contracts indicates there are significant risks of non-performance, and these risks are assumed by the Government. The author provides supporting evidence for this thesis by reviewing Board, Court and Comptroller General decisions and procurement regulations; notably, the cost reimbursement Termination clause.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[36]

Volume 15, Summer 1981, Issue 1

"Arbitrating Commercial Disputes: More Problems Than Promise," Eldon H. Crowell, pp. 1-10.

Arbitration is a frequently advocated alternative to litigation for resolving contractual disputes. The court system is noted for being slow and costly, and court decisions are subject to appeal. On the other hand, arbitration is characterized as a speedy, low cost alternative. Furthermore, arbitration decisions are final.

This article examines commercial arbitration in three contexts: private commercial contracts, Federal procurement, and international trade. It examines arbitration at each of

its three stages of use: negotiation of the agreement to arbitrate, the hearing itself, and the award.

The author concludes that arbitration is not a complete and separate alternative to litigation. In fact, issues of arbitrability and problems with award enforcement often lead the disputing parties into litigation. The author suggests several general recommendations to develop arbitration as an alternative to litigation.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [40]

"Targeting Unallowable Interest Expense," Joseph H. Connolly, pp. 15-25.

This article discusses a long standing Government policy which makes interest expense incurred by a contractor an expressly unallowable contract cost. This policy has been a source of controversy for many years. This article summarizes the most significant events (from Treasury Decision (TD) 5000 of 1940, to the Defense Industrial Base Panel Hearings of 1980) which link current policy to the past.

This article next discusses the pros and cons of making interest expense an allowable cost. Those in favor contend that interest is a normal cost of doing business; those not in favor contend that interest should be recovered through alternative means. The author concludes both are right, but on balance it remains inappropriate to allow interest as a element of contract cost. This article concludes with specific recommendations to meet the challenge of maintaining a strong defense industrial base within the fiscal constraints mandated by Congress and the taxpayer.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [46]

"A Model for Enhancing Second Sourcing and Production Competition in Major Weapon Systems Acquisition," Benjamin R. Sellers, pp. 27-40.

This article discusses the subject of second sourcing in major systems acquisition. It presents a detailed model to assist in generating a second source.

The author examines the potential benefits and potential problems associated with introducing competition to the production phase of the acquisition. Next, he discusses five techniques that can be used to establish a second source: (1) form-fit-function, (2) technical data packages, (3) direct licensing, (4) leader-follower, and (5) contractor teams.

Following a discussion of thirteen variables which affect the selection of a "best" method for generating a second

source, this article provides a detailed description of the Second Sourcing Method Selection Model (SSMSM). The objective of the model is to provide a systematic and logical framework for evaluating each of the methods and selection of the optional technique.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[30]

"CMSEP -- One Approach to Contract Management," Thomas A. Pawlow, pp.41-49.

This article discusses the Contractor Management System Evaluation Program (CMSEP) developed by the Air Force. This article examines its effectiveness as a management tool in promoting the prevention of defects, by ensuring the existence and operation of adequate contractor management systems.

CMSEP makes use of a system approach in the evaluation of a contractor's management system and practices. The system consists of a number of questions, called Management System Indicators (MSI) directed at specific areas of a contractor's operations. Each MSI is then assigned a color code indicating the quality of the contractor's management system for a particular area of operation. With this information, Government and contractor personnel can direct corrective action to improve the contractor's management system.

The author concludes that the CMSEP has proven effective and should be considered for adoption by other Government agencies. He believes CMSEP is an excellent tool for program managers to use to assess the contractor's management systems, and ensure that system deficiencies are corrected in a timely manner prior to cost, schedule or performance impact.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [28]

"Recent Developments: Supreme Court Determines the Scope of the Comptroller General's Right to Examine Contractor's Books and Records Under the GAO Audit Clause," D. Michael Fitzhugh, pp. 57-59.

This article reviews recent litigation which addresses the scope of the Comptroller General's (CG) rights of access to the books and records of Government contractors. The scope of the CG's rights is derived from certain statutorily derived clauses found in most negotiated federal contracts.

A particular source of controversy has been the "Examination of Records" Clause. It gives the CG the right to examine the books and records of a contractor that pertain to and involve transactions relating to a Government contract.

Several court interpretations of the clause have split at least two circuits. The Seventh Circuit has broadly

interpreted the clause, giving the CG broad access into contractor's books and records. The Second Circuit, however, did not support the Seventh Circuit decision and restricted the CG's audit rights. The Supreme Court reviewed the matter and affirmed the Second Circuit position, without opinion, by an equally divided court. The author concludes the issue was not resolved and will require further review.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [47]

"Use of Fixed Price Incentive/Award Fee Contracts for the Construction of Follow U.S. Navy Ships," Arthur C. Meiners, Jr., pp. 62-67.

This article advocates the use of the Fixed Price Incentive/Award Fee (FPI/AF) contracts type for procurement of follow ships. Historically, follow ships have been procured under FPI contracts. These procurements were characterized by cost growth and delivery delay problems.

The FPI/AF approach is to structure the contract as a fixed price incentive contract, with incentive features for cost only. The award feature is designed to motivate and encourage the contractor to provide superior technical, schedule, management and cost performance. Award fee determination is based on subjective contractor performance evaluation in particular areas of performance. This article discusses the benefits of FPI/AF contracts, and concludes by suggesting other applications and variants of this type of contract.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [33]

"Government Procurement Policies: An Invisible Barrier to U.S. Exports in the 1980's," A.D. Cao, pp. 68-72.

Recent multilateral trade negotiations and agreements on government procurement policies and practices, including the General Agreement on Trade and Tariff (GATT), the US Trade Agreement Act of 1979, and Multilateral Trade Negotiations (MTN), have attempted to make more stable the world trade market. Within months of these agreements, a new surge in protectionism in Government was taking place.

This article addresses the practices and procedures behind which most countries enact Government procurement restrictions, violating the intent of the trade agreements. The author describes common "invisible" techniques practiced by trading countries, and cites examples of restrictions enacted by several countries. He discusses the causes of these invisible barriers, problems with GATT and the MTN agreements,

and the impact and implications of these barriers for U.S. policy.

The author concludes that the agreements were an important step forward in reducing invisible barriers to trade. However, it is important to realize that policing and enforcement of the agreements is necessary.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[63]

"Changes in Government Contracts as they Relate to the Scope of the Contract and the Scope of the Competition," Ralph J. Capio and Robert E. Little, Jr., pp. 74-77.

This article discusses some of the issues which must be considered when Government contracts are changed. The authors often cite precedent court decisions in their discussion of the issues.

One issue is whether a change will affect the scope of the contract. Another is whether a change will affect the scope of the competition. In determining if the Change clause has been exceeded, or a mutually agreed change is outside the scope of competition, the authors suggest an analytical tool to apply. The tool is a series of questions that should enable the user to avoid the traps inherent in changing a contract.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[32]

"IR & D/B & P -- Boondoggle or Necessity," Steven C. Lathrop, pp. 78-81.

Independent Research and Development (IR & D) and Bid and Proposal (B & P) costs are indirect costs. IR & D cost is technical effort that is not sponsored by or required in the performance of a contract. B & P costs are incurred in preparing, submitting and supporting bids and proposals on potential Government or non-Government contracts.

This article discusses how the current philosophy regarding the allowability and allocability of these costs has evolved since World War II. The author then discusses the two methods in use for determining allowable IR & D and B & P amounts. The first method requires the negotiation of an advance agreement; the second method involves the use of formulas. The particular method a company will use is based on a monetary threshold.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

"Student Research Project: Contractor Opinion Survey," Charles D. Sulloway, Jr., pp. 82-91.

This article interprets and summarizes the results of a survey conducted by Florida Institute of Technology graduate students. The objectives of the survey were to add to the students understanding of the Department of Defense (DoD) procurement process, and to identify potential areas for future scientific survey and analysis.

The respondents were 48 DoD contractors doing business with the Army. There were 13 primary questions which addressed various topics. Examples included comparisons of Government and Industry negotiations, comparison of military DoD and civilian DoD procurement professionals, contractor use of the Defense Acquisition Regulation (DAR), and the contractor's preferences for contract types. This article includes the survey questionnaire and a summary of the responses.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE [23]

"The Public Purchasing Profession," S. D. Zemansky and Stephen B. Gordon, pp. 92-104.

This article seeks to determine the professional status of the public purchaser. The authors observe that many work groups (education administrators, city planners, policemen, and other specialists) have claimed professional status; in the process, they have watered down the definition of a profession.

The authors make the distinction that an individual can be a professional, regardless of their field of endeavor, without being a member of a recognized profession. The authors seek to answer two questions regarding the public purchaser. First, is he or she a professional? second, is his or her occupational specialty a profession?

In answering the first question, the authors discuss the public purchaser in terms of the basic traits normally associated with a professional. They conclude that the public purchaser can be a professional, regardless of the status of public purchasing as a profession.

In answering the second question, the authors discuss the public purchasing occupation in terms of criterion which are used to describe a profession. They conclude that professional status for public purchasing is structurally available, but not yet a reality.

PROFESSIONAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [23]

"Defense Contract Management in Multinational Programs," John S.W. Fargher, pp. 1-14.

This article provides a comprehensive overview of the complex issues inherent in contract management of multinational programs. Contracting issues emanating from regulatory procedures and constraints, as well as the results of experience gained in multinational programs, are presented. The purpose of this article is to provide a basis for program manager and contracting officer sensitivity to these issues.

The author first discusses the NATO contracting environment, including the various modes of system development at the transnational environment. From this background he proceeds to discuss some of the problems and differences in the multinational contracting process and general legal considerations. A detailed discussion of the Defense Acquisition Regulations (DAR) on foreign acquisition is also presented. He also discusses duties and customs, application of the Cost Accounting Standards, disputes, international agreements, records examination, balance of payment program, and Canadian purchases. This article concludes with a discussion of the effects of the General Agreement on Tariffs and Trade (GATT).

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [63]

"Misconceptions of Profit in Defense Policy," G.R. Simonson, pp. 15-19.

Government misconceptions concerning profit have resulted in a defense profit policy for negotiated procurement that has misdirected investment away from defense production and driven up costs. This article makes use of a 1976 Department of Defense (DoD) study on defense profits (Profit '76), to demonstrate the misleading views of the Government regarding Industry profits and investment. The most important misconception is that profit is a function of cost. This misguided policy leads the contractor to employ the most costly production methods. It also encourages reduced investment, since production cost savings will reduce cost-based profits.

The author suggests a solution to the problem of low capital use and high defense production costs: base negotiated profit on the estimated value of the equity capital, employed

at a rate equal to the opportunity costs of capital in non-defense production.

THEORETICAL, NORMATIVE, EMPIRICAL, DEDUCTIVE

[46]

"On the Utilization and Degradation of the DoD Acquisition System for Socio-Economic Policy Implementations," Dale E. McNabb, Kenneth A. Olmstead, and William E. Smith, pp. 21-35.

The Federal procurement process has long been considered an appropriate vehicle for implementing socio-economic policy. These policies impact upon the procurement process in a number of ways, including source selection, supplier type and location, employment considerations, wages, benefits and working conditions, and other considerations. The Federal procurement community has often been criticized for pursuing an efficient procurement process in lieu of providing full support for socio-economic programs.

This article represents a theoretical/analytical approach to determine how the acquisition system could be utilized more effectively for socio-economic purposes. The authors develop a series of models into an integrated framework for analysis and the development of new perspectives into socio-economic policy.

They also develop an approach for rational utilization of the Department of Defense (DoD) acquisition system for socio-economic policy implementation. It represents an attempt to balance the costs of policy implementation (degradation of the acquisition system) with its benefits (socio-economic objectives).

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[57]

"The Impact of Cost Accounting Standard 409 on the Defense Industry," Jack C. Kline and James M. Fremgen, pp. 37-45.

Cost Accounting Standard 409, Depreciation of Tangible Assets (CAS 409), was issued in January 1975, amid significant controversy. Defense contractors were in opposition to CAS 409, arguing that it would result in excessive record keeping and, more importantly, reduced contractor cash flow.

The authors surveyed the controllers of two hundred defense contractors to determine what impact CAS 409 has actually had on their companies. Based on the responses of fifty companies, the authors concluded that contractor experiences with CAS 409 have been mixed. In general, the most serious financial problems that had been predicted have not materialized for most of the surveyed contractors. Most problems were the results of disputes with the Government over estimation of

service lives of assets, and the records required to justify these estimates.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[6]

"Accounting Court -- An Idea Whose Time Has Come," Donald J. Kinlin, pp. 46-49.

This article advocates the establishment of an Accounting Court to decide the purely accounting issues raised by Cost Accounting Standards (CAS). The court would be composed of attorneys with accounting expertise, allowing the court to expedite its decisions once a case has been heard.

The author discusses the CAS, the Cost Accounting Standards Board (CASB), dispute procedures, and the Defense Acquisition Regulations (DAR). Next, he describes the characteristics of an accounting court, and arguments for and against its establishment. One such argument against an accounting court is that a system for handling accounting disputes already exists.

The author believes there are stronger arguments for such a court. Central to his argument is the belief that it is easier for accountants to learn legal procedures and rules of discovery, than it is for lawyers (judges) to learn accounting. This would shorten the length of the learning phase of a legal review and expedite the legal process.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[22]

"Sole Source and Competitive Price Trends in Spare Parts Acquisition," Charles H. Smith and Charles M. Lowe, Jr., pp. 51-56.

Most Department of Defense (DoD) procurement is accomplished via sole source rather than competition, even though the benefits of competition are widely recognized. Before introducing competition to the production phase of a major weapon system procurement, a forecast of the recurring savings to be realized from competition is required. The purpose of this article is to present empirical data for analysts to consider in making such forecasts.

The authors analyzed the procurement histories of a sample of randomly selected spare parts. Their aim was to determine if the rate of decline in price was more rapid under competitive vs. sole source procurement, and what percentage savings could be realized on the first competitive buy.

The results of their in-depth statistical analysis concluded that the rate of decline in price was essentially

equal, and that a percentage savings between 15-20% was likely on the first competitive buy.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[30]

"Understanding CAS 410," Lane K. Anderson and Howard G. Smith, pp. 57-59.

Cost Accounting Standard 410, Allocation of Business Unit General and Administrative Expenses to Final Cost Objectives (CAS 410), was issued amid significant controversy because of its definitions of general and administrative expenses (G & A), and its prohibition of cost of sales and sales allocation bases. This controversy is further agitated by the alleged illogical and unintelligible organization of the CAS.

The purpose of this article is to explain the format of the standard, review the expenses covered by the standard, and to show interrelationships among the provisions in the standard via a flowchart.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [6]

"Invisible Barriers to International Procurement in Brazil and Mexico," A.D. Cao, pp. 63-65.

This article discusses the dissatisfaction of the Latin American countries with the industrialized nations' management of world trade, and their perception that world trade agreements serve the interests of the developed countries. This has created a climate of hostility that could hurt U.S. trade in that region.

Latin American trading partners of the U.S. will reduce U.S. imports, to improve their balance of trade deficits, through the use of non-tariff barriers. One such barrier discussed in this article is the area of Government procurement practices (GPP). It restricts foreign suppliers in favor of domestic suppliers. This article specifically discusses the non-tariff barriers which will inhibit U.S. trade with Brazil and Mexico.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[63]

"Life Under Cost Accounting Standard 411," Lane K. Anderson, pp. 67-70.

Cost Accounting Standard 411 (CAS 411) addresses inventory costing methods. Last In, First Out (LIFO) inventory costing methods were excluded from among the acceptable methods in the early draft of CAS 411 because they were considered unacceptable for contracting purposes. The Cost Accounting Standard Board (CASB) noted that the intent of CAS 411 was to provide for better allocation and measurement of material costs for specific contracts, a condition not met by LIFO. The final version of CAS 411 did permit LIFO for costing company-owned inventories.

This article discusses the systematic and rational costing of inventories under CAS 411, including cost attachment, unit cost determination and timing. Next, it discusses various LIFO costing methods and provides guidance for selecting a LIFO method that conforms to CAS 411.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[6]

"Achieving a Higher and More Competitive State of the Art in DoD Procurement Procedures," Charles W. Sherrer, pp. 71-79.

This article suggests how existing Department of Defense (DoD) policies, procedures and regulations might be amended to achieve its goal of further enhancing the competitive nature of its procurement activities. The author derives his suggestions from legal precedents arising out of antitrust litigation, and the latest antitrust philosophy.

This article stresses that a competitive procurement philosophy is the foundation of DoD procurement regulation. This has made the Defense Acquisition Regulation (DAR) an effective regulation in procurements where competition exists. The author notes, however, that major system procurement in DoD occurs in an oligopolistic market. He recommends the regulation be reviewed and amended accordingly.

This article also addresses the role of Government accountants and auditors in the competitive process, and areas of concern in joint ventures.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [25]

"Contractor Response to Award Fee Contracts," Raymond G. Hunt, pp. 84-85.

The award fee contract is an incentive type contract which has grown in popularity, especially in the procurement of other-than-off-the-shelf requirements. Its popularity has increased among both Government and contractor procurement personnel.

The author conducted extensive interviews with 16 contractor personnel about their experiences with the award fee contract. From these interviews, he drew conclusions about contractor perception of the award fee contract environment. For example, the award fee contract induced a highly responsive attitude from the contractor. They perceived they were well-informed on the essentials of the award fee plans, and were given extensive feedback on their performance.

This article addresses other aspects of the award fee contract and concludes that the contract is a highly effective method for motivating the contractor, and empowering the Government program manager.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[33]

Volume 16, Summer 1982, Issue 1

"Court of Claims Springs a Trap on Uncertified Contractor Claims," Buel White and David A. Churchill, pp. 1-5.

The Contract Disputes Act (CDA) provides that a contractor seeking review of an adverse contracting officer's final decision may appeal to a board of contract appeals or The Court of Claims. For contractor claims exceeding \$50,000, the contractor is required to certify the claim.

The authors contend that recent court decisions regarding claims certification under CDA places a limitation on a contractor's right to appeal. This limitation may preclude the recovery of interest; it may even preclude administrative review of an adverse contracting officer's decision.

The authors conclude that this serious pitfall to public contractors was not the intent of Congress when it enacted CDA. They recommend these rulings should be reconsidered.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[40]

"Financial Management of Defense Codevelopment and Coproduction Programs," John S.W. Fargher, Jr., pp. 6-17.

This article discusses the complex financial management requirements associated with multinational codevelopment and coproduction programs. The financial management of such programs are typically negotiated by program participants whose Governments and firms may operate under different policies, regulations and fiscal cycles. This creates special problems that need to be understood by the financial managers involved.

The author reviews a number of policies, agreements, and procedures which influence financial management. Topics include foreign acquisition, trust fund management, recoupment of nonrecurring costs, pricing and asset charges, currency management, and Department of Defense (DoD) audits.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[7]

"Court of Claims Jurisdiction Over Nonappropriated Funds Activities," Michael T. Janik, pp. 18-23.

Under the Tucker Act, the Court of Claims has almost exclusive jurisdiction over contract claims against the United States. The Act also requires that a final judgement against the Government be paid out of appropriated funds. For this reason, the Court of Claims has limited its jurisdiction to claims involving appropriated funds.

The article details how the court of Claims has liberally interpreted its jurisdiction boundaries when requested to review a case involving nonappropriated funds. The author discusses recent decisions of the Court that have made it clear that a claim does not have to involve appropriated funds in order to be reviewed. It is sufficient that the contract being sued upon could have been financed with appropriated funds, whether or not there funds were available.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [40]

"The recovery of Attorneys' Fees by Government Contractors and Grantees," Ralph E. Avery, pp. 25-33.

The Equal Access to Justice Act (EAJA) subjects the Government to exceptions (statutory and common law) to the "American rule," which states that each party to litigation bears its own legal expense, regardless of who prevails. This article discusses the circumstances under which Government contractors and grantees have been permitted to recover

attorneys fees. An extensive review of recent decisions is used by the author to describe these circumstances.

This article describes the EAJA and addresses questions raised by the Act. The author concludes that the law governing the recovery of legal fees has been inconsistent, and decisions have often been in conflict. However, it is clear that legal fees may be recovered in judicial litigation with the Government, to the same extent as they could have been recovered against private parties under common law.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [40]

"Contracting Out Under MOB Circular No. A-76 in the Department of Defense," David B. Dempsey, pp. 41-48.

MOB Circular No. A-76 (A-76) is distributed to establish the policies and procedures to be used by Federal agencies in determining if a work requirement should be performed by a commercial activity or a Government activity. A defense agency or service is permitted to perform a commercial activity if (1) the Government's cost is lower, (2) the commercial activity is operated by military personnel in an area of national defense, or (3) no satisfactory private or commercial source is available.

Cost analysis is the primary method used in making this determination. The general guidance for conducting cost analyses is the Cost Comparison Handbook, a result of A-76 implementation. This article describes the methodology and elements of cost analysis, as well as legal considerations.

The author concludes that the effects of A-76 are not clear. However, its purpose is clear -- to determine the least expensive way to satisfy a requirement.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [25]

"ADP Machine Cost Distribution: A Discussion of Industry Standards," Aerospace Industries Association, Inc. Cost Principles Task Group, pp. 52-58.

The purpose of this article is to provide general guidance when establishing or reviewing cost distribution techniques to be used with data processing. It is based upon approaches which many defense contractors and commercial activities have used beneficially.

Central to a cost distribution technique is a cost algorithm. This article describes how cost algorithms have been developed as the ADP environment evolved. It then discusses various competing pressures on the development and maintenance of the algorithm, and the various issues to be considered in selecting an ADP cost distribution system (CDS).

A sequence of steps to take in developing an ADP CDS is outlined.

This article concluded with a brief discussion of current and future developments in ADP CDS. A disclosure of the CDS to the Government should include a description of the system concept and the general techniques employed.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[5]

"Financial Management and Data Processing Considerations for Fixed Price Contracts/Subcontracts with Progress Payments," William S. Curry, pp. 59-66.

This article describes the accounting treatment for progress payments under a fixed price contract or subcontract. It also suggests a tool which can be used to deal with the unique characteristics of this contract type.

This article is directed at the contract administrator and his/her unique concern in administering contracts with progress payment: forecasting cash payments, recordkeeping, invoice approval, and alternative actions in the event of unsatisfactory performance by the contractor.

The tool is a matrix format that results in a simulation of the contract to include costs, progress payments, deliveries, liquidation of progress payments, partial payments, and cash flow to the supplier. This article provides a detailed description (appendices and flowchart) of the development and use of the method in an automated and non-automated environment.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[31]

"Why Does the Seller have Trouble in Meeting the Buying Requirements? DOD and Industry Speak Out (and Disagree)," Robert F. Williams, pp. 67-71.

The buyer (Government) and seller (Industry) often disagree when something goes wrong in the procurement process. They often do not agree as to the cause of the problem and may question the other's motives and abilities. This article discusses an aspect of a U.S. Army study which examined the buyer's and seller's perceptions of what causes difficulties for the seller in the course of a purchase. The data source was a questionnaire sent to defense contractors and Army procurement personnel.

The author concludes that there is widespread disagreement over basic issues in the buyer-seller relationship, including Industry objectives, the external environment, and Industry's decision-making process.

The author recommends several long-term changes to resolve the basic differences. These changes include minimizing the arm's-length requirement in buyer-seller relationships in favor of closer working relationships, and to proceed with these changes incrementally and cautiously.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE [57]

"Control of Cost Growth in Major Weapon Systems Acquisition," Alfred M. Selgas, pp. 73-78.

The intent of this article is to produce an integrated/holistic/synergistic view of cost growth and its control. Cost control spans the life of the system and depends on a number of factors, including performance and delivery requirements.

The author prescribes a three-step, systematic approach to develop an integrated/holistic/synergistic view. He concludes that to control cost growth in a changing environment, the underlying need is for more competent people with an overall strategy and specific tactics. Specific techniques/topics ripe for action include (1) lower high/low weapons mix, (2) multi-year funding, (3) should-cost estimating, and (4) greater use of A-109.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE [51]

Volume 16, Winter 1983, Issue 2

"DoD Contracting and Acquisition: Unprepared for a National Emergency," Peter J. Perkowski, pp. 1-8.

In 1981 there was widespread concern among DoD acquisition managers, researchers, and the civilian sector that the DoD contracting process may not be ready to meet the demands of a national emergency, mobilization, or a large scale conflict. After conducting library research and unstructured interviews with knowledgeable sources, the author concludes this concern is warranted.

Most interviewees believed the cause of the problem was the deteriorating industrial base, not the contracting process. There were numerous procedural changes identified by the interviewees as necessary in the event of an emergency. However, the author was unable to identify the existence of any documents or studies which indicated to what extent national emergency contracting and acquisition planning is being performed.

The author suggests corrective actions to improve the industrial base and emergency contracting procedures. One action would be to fully exploit existing laws and regulations, such as "Exception 16," which allows for the purchases in the interest of national defense or industrial mobilization.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE [24]

"New Approaches for Quantifying Risk and Determining Sharing Arrangements," Raymond S. Lieber, pp. 9-16.

The author introduces a new theoretical approach for quantifying contractual risk and determining cost/savings sharing arrangements. He suggests the negotiation process can be enhanced by quantifying risk using statistical methods.

The article discusses two approaches which allow the development of risk sharing arrangements between the buyer and seller. The approaches are PREDICT 2000 and Underlying Learning Curve, and each approach makes arrangements based upon the probability density function. The approaches can also develop techniques which can assist in budgeting and determining when an acquisition should be handled as a firm-fixed price contract.

THEORETICAL, NORMATIVE, EMPIRICAL, DEDUCTIVE [46]

"Management by Objectives in Procurement: A Government/Industry Comparison," James R. Wetherington, pp. 17-22.

Management by Objectives (MBO) is a management philosophy which encourages individuals to establish goals and then set their objectives in quantitative terms. They are then held responsible for accomplishing the objectives, and are rewarded or penalized accordingly. The purpose of this study was to evaluate Industry and Government procurement office management effectiveness, as perceived by the employees in the respective organizations, in terms of MBO.

The author employed a sample survey of Government and Industry procurement personnel. The survey consisted of a questionnaire technique (called Management System Balance Sheet (MSBS)) that could be used to evaluate management styles, set goals, and monitor and control the management systems of the organization. An analysis of the survey results allowed the author to evaluate the relative strengths and weaknesses of the surveyed organizations in nine areas of management concern.

The author concludes that Government and Industry procurement personnel have similar general attitudes. However, differences were discerned in the various organizational strengths and weaknesses described by the MSBS technique.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE [23]

"Cost Variation Study of Reparable Items," Carol Hawks, pp. 28-36.

Current indices for updating unit prices for replenishment spares budgets and Program Operating Memorandums (POMs) are based on inflation. These indices are applied to the last purchase price of an item to project current prices. This process is called price redetermination. With current indices, inflation is the only factor accounted for as a cause for price changes. Samples indicated that many items showed price increases significantly higher than could be accounted for by inflation.

The author prescribes a set of indices to use in the price redetermination process for reparable items. These indices reflect price changes for all reasons, not just inflation. This is prudent, since reparable items are unlike the market basket of goods used to estimate inflation rates. The article details the methodology used in determining the new indices.

The results of using inadequate indices are understated budgets and POMs, and reduced weapons systems support; results the new indices can change.

PRACTICAL, NORMATIVE, EMPIRICAL, INDUCTIVE [49]

"The Cost Growth Phenomenon," Eugene L. Scott, pp. 37-45.

The author describes how cost growth has been a recurring phenomenon accompanying large, long-term projects, from the Sydney Opera House to the Alaska Pipeline. The Department of Defense (DoD) has been addressing the problem since the 1950's. Numerous attempts have been made to overcome the phenomenon -- the "Fly-Before-Buy" concept, the "Contract Definition" program, "Incentive Contracting", "Total Package Procurement", "Design-to-Cost" and "Should-Cost", to name a few -- but the phenomenon persists as the major problem in large procurements.

This article discusses the primary causes for cost growth. Fifteen causes are separated into three categories: (1) planning difficulties, (2) risk elements, and (3) management inefficiencies.

The author offers several partial solutions, but observes that there are often unpredictable aspects of cost growth. It

can be minimized by planning and managing controllable elements, allowing for contingencies, and understanding its basic causes.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [27]

"Federal Financial Support of the Defense Industry: Indirect Methods," Walter E. Buczynski, pp. 46-51.

The defense Industry exists on direct and indirect financial support from the Federal Government. Direct financial support is in the form of annual appropriations expended by the Defense Department (DoD). This article discusses three types of indirect financial support in terms of former policies, changes, and current use: (1) multi-year contracting, which guarantees future production, using cancellation fees as a penalty; (2) flexible progress payments, which provide an improved cash flow to contractors; and (3) defense production loan guarantees, which may result in the banking industry providing favorable interest rates to defense contractors.

The author concludes that these indirect methods should promote capital investment, improved productivity, and cost savings.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [31]

"Acquisition Management Information System (AMIS)," Hamed Kamal Eldin, pp. 53-60.

Due to the complexity involved in DoD contracts, the documentation generated when managing a contract from initiation to closeout has increased beyond the limits of the manual system of business. AMIS was designed as an automated system to improve this situation.

AMIS is an integrated system which performs data, storage, retrieval, status and report functions. At the present time, AMIS contains over 1,200 computer programs that maintain data on over 6,500 contracts valued at more than \$150 billion.

The author discusses specific achievements of AMIS and suggests a number of short- and long-term improvements to enhance the system.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [53]

"The Adventure of the Recondite Boilerplate" (Another Contract Management Adventure of Sherlock Holmes)," Jeffrey L. Michelman, pp. 61-65.

This mystery story follows the fictitious investigator Sherlock Holmes as he uncovers the truth surrounding a cryptic message. He ultimately discovers the message is a Government contract "boilerplate" -- the general and special provisions pertaining to the contract.

The articles fictitious contractor provides a detailed checklist to assist real world administrators in coordinating an analysis of the general and special provisions of a Government solicitation.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [37]

Volume 17, Summer 1983, Issue 1

"Debugging" the Contract Disputes Act of 1978," John J. Grossbaum, pp. 1-18.

This article provides a detailed description of the Contract Disputes Act (CDA) of 1978; it identifies both obvious and subtle gaps in the legislation, and describes debugging efforts to fill these gaps. The author discusses potential areas of controversy relative to the CDA. He supports his observations with numerous references to court decisions.

The most significant gaps identified by the author relate to the transitional provision of the CDA, pre-CA interest and claims certification, post-CDA claim certification under pre-CDA contracts, defining "claim," and provisions regarding interest.

The author concludes the CDA represents important departures from prior practices that are generally welcomed by the procurement community. He notes that although there are many gaps in the legislation, the debugging process seems to be nearing completion.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [25]

"Resolution of International Contract Disputes," Eldon H. Crowell and Peter F. Garvin, pp. 19-27.

This article focuses on arbitration as a means for settling international contract disputes. An estimated one-third of all international contracts result in disputes; one-half of these disputes end up in arbitration. This article addresses some of the key considerations in drafting arbitration agreements for international contracts. It also includes a discussion of the major institutions available for supervision of international arbitrations.

The advantages of arbitration include: a decreased need for litigation, fewer problems regarding jurisdiction over foreign parties, and decisions that are more easily enforced. However, arbitration is also plagued by several of the inefficiencies, delays, and excessive costs typically associated with litigation.

The authors conclude that arbitration is a substitute for, not an alternative to, litigation.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [63]

"Looking Ahead at Productivity and Defense Contract Costs," Joseph H. Connolly and Robert E. Shafer, pp. 31-39.

This article examines the issue of productivity and its impact on the pricing of defense contracts. The authors assert that once this linkage is established, it will cause a change in the procurement community's approach to contract costing concepts.

The authors review the elements of productivity, including the labor factor, the capital factor, and the efficiency factor. They review ways in which productivity is measured, including output per man-hour and total factor productivity. They then discuss Japanese productivity approaches and U.S. productivity initiatives.

This article focuses on the impact of these initiatives on productivity; the most notable change is the increase of indirect costs as a percentage of total contract costs.

The authors conclude that the procurement community must concentrate on controlling total contract costs and de-emphasize controlling direct costs or overhead rates.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [52]

**"Quality Circles -- The Latest Fad?" Richard A. Stimson and
Permelia A. Mossburg, pp. 41-44.**

This article discusses the concept of quality circles and the opportunity for its success in U.S. industry. Established in Japan in 1962 as a means for improving quality and productivity, quality circles are groups of people who voluntarily meet to solve problems in their work area.

The authors discuss the advantages, weaknesses, and implementation of quality circles in the U.S. and Japan. They note many of the reasons for the concept's success in Japan are culture-based and not easily duplicated in the U.S.

The authors conclude that many circles in the U.S. will fail because they are not treated as an integral part of the company-wide environment. They believe the quality circle is an excellent idea but suggest U.S. companies should not assume what works in Japan will work in the U.S. Instead, they urge U.S. firms to look for their own solutions to quality problems.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [52]

**"Government-Industry Contracting: What Should the Relationship
Be?" Derald A. Stuart, pp. 47-50.**

This article examines the Government-Industry relationship from several different perspectives: Industry (seller), the Executive Branch (buyer), the Congress, the public, and users of the product. It also examines the relationship under different economic models: classical free market, oligopoly, monopoly, and nonclassical market.

The author then describes the post-World War II procurement practices that led to a sense of distrust in the Congress regarding Industry and the military. This mistrust, communicated through legislation, has shaped a procurement environment characterized by (1) emphasis on the acquisition process instead of the product, (2) all parties taking a short-term, limited view of their actions, and (3) the encouragement of a win-lose, adversarial relationship between the military and Industry.

The author concludes a project or program is doomed for failure unless it is procured in an environment characterized by mutual trust, respect, and dependency.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [24]

"Architect and Engineering Contracts: New Insights into Cost Estimation," Everette L. Herndon, Jr., and Shu S. Liao, pp. 51-57.

This article discusses an approach for developing more effective Government estimates for use in negotiated Architect and Engineering (A & E) contracts. The need for improved methods is necessitated by increased emphasis on procurement of quality design through technical competition and negotiation; not price competition alone. A better Government estimate will result in a stronger Government negotiating position.

The authors first describe the A & E contracting environment, current methods of Government cost estimation, and deficiencies present in these methods. Next, they describe an improved approach. After reviewing 300 A & E contracts, the authors isolated eight descriptive variables for analytical computation. The results of their analysis indicated cost estimates in A & E contracts are most often influenced by three variables: (1) type of facility, (2) the range of estimated construction cost, and (3) the type of work.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[65]

Volume 17, Winter 1984, Issue 2

"New Restrictions on the Government's Right of Administrative Offset," Herbert L. Fenster and Frederic M. Levy, 1-5.

The Debt Collection Act of 1982 was enacted to enhance the authority and ability of the Federal Government to collect debts owed it by participants in Federal programs and activities, including Government contracts. The Act established a new set of requirements that the Government must comply with before collecting a debt by administrative offset.

The authors suggest that the requirements restrict rather than enhance the Government's authority and ability. The authors first describe the procedural protection afforded an alleged debtor prior to the Act. Then they describe specific mandatory due process procedures required by the Act, including the right to agency review and the opportunity to defer payments. These new procedures were not previously required by regulations and were considered discretionary by the Government. The authors conclude that until Federal agencies promulgate regulations implementing the Act, they are

without legal authority to collect on their claims by administrative offset.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [22]

"Government Contract Financing -- Balancing Contractor Need Against Government Cost," Keith L. Baker and Keith L. Davis, pp. 7-17.

The authors first discuss several methods used to finance Government contracts, including the use of private sources, commercial banks, venture capitalists, insurance companies and lease financing, and Government financing programs. The article then addresses the timing of contractor payments under various contract types.

In the authors' view, the two most important methods of contract-by-contract financing are (1) advance payments and (2) progress payments. Each method is described in detail, including how the payments are obtained by the contractor and administered by the Government. The authors also discuss the Prompt Payment Act and the regulation implemented to carry out the interest penalty provisions of the Act.

The authors conclude that the Government can effectively reduce the contractor's cost of performance (and therefore the ultimate procurement cost to the Government) by providing financing through advance payments and progress payments, since few contractors can obtain financing at a cost lower than the Government.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [31]

"Contract Accounting Under the FAR -- A Developing Picture," James P. Bedingfield and Louis I. Rosen, pp. 21-25.

The Federal Acquisition Regulation (FAR) becomes effective on April 1, 1984. The FAR represents a single procurement regulation that contains substantive changes from its predecessors, the Defense Acquisition Regulation (DAR) and the Federal Procurement Regulation (FPR).

The authors first describe how the new FAR is arranged differently from the DAR and the FPR. The remainder of the article describes how the FAR differs from its predecessors concerning (1) cost principles and (2) Cost Accounting Standards.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [25]

"Selling and Marketing Costs of Government Contracts: How They're Measured, Assigned, and Allocated -- A Needed Clarification," Aerospace Industries Association Cost Principles Task Group, pp. 29-36.

There have been longstanding controversies among Industry, the accounting profession, and the Government agencies regarding the policies and principles involved in accounting for selling and marketing (S & M) costs related to Government contracts. The controversies arise in part because Government contracts typically will involve a price based on cost, whereas a commercial contract will typically involve a price determined by the marketplace.

This article is designed to aid Industry by clarifying the proper accounting treatment of S & M activities that have been subject to recent controversy. The authors define 17 commonly used Government contracting accounting terms before discussing seven controversial issues regarding S&M costs.

The seven issues discussed are (1) measuring (defining) S&M cost, (2) assigning S & M expense at the business unit level, (3) selecting a base for allocating S&M expense to final cost objectives, (4) allocating home office S & M expense to segments, (5) allocating general and administrative expense to S & M costs, (6) allocating S & M expense to work done by one segment for another, and (7) deferral of S & M costs.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[6]

"Competitive Weapons Systems Procurement: A Summary and Evaluation of Recent Research," Willis R. Greer, Jr., and Shu S. Liao, pp. 37-45.

Extensive research has been undertaken to evaluate the costs and benefits associated with procuring major weapon systems under sole-source and under competition. There is widespread belief in Department of Defense (DoD) circles that competition is beneficial to the Government. However, the authors observe that research suggests competition has resulted in added life cycle costs almost as often as it has produced savings.

Exactly what conditions lead to savings versus losses is not predictable. The authors reviewed numerous quantitative studies that addressed this uncertainty; they conclude no useful model has emerged to help reduce this uncertainty faced by a decision maker. They were, however, able to identify the major factors to be considered in reducing this uncertainty.

The authors conclude with a review of existing empirical studies and propose several issues that should be addressed in further studies of competition in weapons systems acquisition.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[30]

APPENDIX C

This appendix provides synopses of the articles published in the *National Contract Management Journal*, from Volume 18, Issue 1 (Summer 1984) through Volume 22, Issue 2 (Winter 1989). It is reproduced from R.F. Sweeney's 1989 thesis "A Classification System for Contracting Literature" (Sweeney, 1989, pp. 63-94). It has been edited to include the corresponding National Contract Management Association Body of Knowledge module (number in brackets) assigned to each article.

Volume 18, Summer 1984, Issue 1

"The Biennial Federal Budget: A Proposal for Better Government," Phillip H. Miller and Jeffrey K. Reh, pp. 1-14.

Since the late 18th century we have accepted budgeting in the Federal Government on an annual basis. Recently however, Congress' failure to pass all thirteen appropriation bills by the end of the fiscal year which they were intended to fund has resulted in the funding of all or part of the Government under continuing resolutions. The rush to pass the budget within twelve months has immediate harmful effects on budget goals and efficiency.

Among the problems that frantic rushing encourages is a negligence in reviewing and evaluating the programs included in the proposals. In addition, the continuing resolution process can threaten the life of a new or existing program. The inability of Congress to get the job done in a timely fashion also fuels the fire in the lack of public confidence.

This article proposes the institution of a biennial budget. According to the proponents, a biennial budget would a) allow more effective budgeting, b) alleviate the anxiety of the funds recipients, c) protect program continuity, and d) promote better managerial planning.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[1]

"Multiyear Contract Cancellation Ceiling -- An Alternative To Full Funding," Maj. Gary L. Poleskey, USAF, pp. 15-21.

Multiyear contracting fosters efficient ordering and production, enhances industry status in the financial markets, and promotes sound capital investment decisions. Most important, however, is that multiyear contracting reduces the cost of weapon system acquisition.

The multiyear contract cancellation ceiling is a major roadblock to multiyear contracting in DOD. If the military, the administration, or Congress decides to cancel a given program in the middle of a multiyear contract, the contract must be interrupted and the Government must settle a cancellation claim with the contractor within a contractually established dollar amount. Cancellation is tied to a budget decision for a specific fiscal year. It is not the same as a termination for the convenience of the Government which would not be tied to the annual budget process and does not involve a previous agreement on the cost of the settlement.

The article discusses four funding alternatives available in multiyear contracting. These alternatives are: 1) full funding, 2) incremental funding, 3) expenditure funding of advance buys, and 4) phased funding.

The phased funding approach provides the answer to the problems of the contract cancellation ceiling since it ties the unfunded ceiling to multiyear investment items.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [33]

"A New Look at Risk and Profitability in Defense Contracting," Willis R. Greer, Jr. and Shu S. Liao, pp. 23-30.

There has been a great deal of debate over the profitability of DOD business. The Defense Procurement Circular (DPC) 76-3 revised the Weighted Guideline to increase potential profit and stimulate capital investment by contractors. The thought persists that DOD contractors earn excessive profits. It has been argued that DPC 76-3 has been ineffective in inducing greater capital investment.

This article reviews profit theoretically and then describes an empirical test of the theory. The theory is that the "degree of capacity in use in the aerospace industry helps to determine the profitability of DOD business relative to commercial business."

The authors did an empirical test of their theory over twenty years of data. They found that Government contracting officers are able to use their bargaining power to advantage during lulls in industry capacity utilization.

The study showed that DOD business is not less risky than commercial. Management is more likely to prefer commercial

work because the "volatility of returns to net worth is lower."

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[33]

IMIP Productivity Factor -- Changing the Way DOD Does Business," Lt Col. Eugene E. Kluter, USAF, pp. 31-34.

Defense contractors now need to be concerned with foreign defense capabilities to remain competitive for U.S. Government business. The DOD Industrial Modernization Incentives Program (IMIP) provides contract incentives to encourage industry to invest in capital equipment. The heart of the program is the agreement between DOD and the contractor to share in the savings generated by mutual investments in technology, capital investments, and labor.

"Protected sharing" is the incentive payment method under the IMIP program. Because of the complexity of and time required for the advance agreement negotiations and understandings, DOD only executes the program with a few prime contractors. For the full potential of the IMIP program to be realized, it must be applied against a broader segment of the industrial base.

The F-16 Program Office and General Dynamics, on whose original Tech Mod program the IMIP program was founded, have designed a new concept to simplify implementation of the IMIP. The new approach is called the "Sharing Factor" approach.

The development and implementation of the IMIP productivity factor may enable us to expand the benefits we receive from the IMIP program.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[11]

"Relaxing the Government's 'Firm Bid Rule' When Bids Have Been Extended: A Recommendation," Robert A. Farber, pp. 35-43.

This article first explains the Firm Bid Rule. It then goes on to discuss instances where the contracting officer has requested extension from the contractors on the acceptance period of the bids. On occasion during the extension period, a firm has attempted to withdraw its bid and this has not been permitted.

The author recommends that when a contracting officer finds it necessary to request an extension of the offers the contractor be given a chance to withdraw his bid at any time prior to award. In other words, the requested extension period would be free from the Firm Bid Rule. The contractor is extending his risk when we ask for an extension with no reciprocal consideration from the Government. By enabling a

contractor to withdraw his bid during the bid extension period the Government is lessening the risk borne by the contractor. The right to withdraw would be a fair exchange for the bidder's continued risk.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [24]

"The Government's Duty to Communicate -- An Expanding Obligation," Alan Gould, Robin Leonard, and Robert Gore, pp. 45-49.

This article discusses two important doctrines--the doctrine of superior knowledge and the duty to communicate. The Government is required to disclose to the contractor any "superior knowledge" it has in its possession that would be necessary in the performance of the contract. This includes all information that it is not reasonable to expect the contractor to have. It is also the duty of the Government to communicate to the contractor "the fullest and most accurate information possible concerning the contract requirements."

It used to be that the Government's duty to disclose was limited to factual information. However, in the Automated Services Inc. case (ASI), the GSBICA expanded the duty to communicate to nonfactual opinions and views.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [54]

Volume 18, Fall 1984, Issue 2

"Government Indemnification of Contractors: How Far Can You Go Under Public Law 85-804," Richard A. Smith, pp. 1-18.

The Government is a sovereign, it is exempted from suit unless it agrees to be sued. Government contractors, on the other hand, are not exempted from suit. Defense contractors want to be indemnified against losses arising out of suits connected with Federal programs. The DOD and Department of Justice are against indemnification agreements. They believe that the threat of suit motivates contractors to provide quality products. If the threat is removed, quality may be removed. The problem is that many of the programs give rise to the possibility of very large claims.

The article tells the history of Public Law 85-804 which gives "broad discretion" to Federal agencies to offer indemnification to their contractors. The First War Powers Act, Title II provided contractors indemnification during World War II and the Korean conflict. Coverage at this point

was for contractors who were threatened by enemy action or worked in a high risk environment. Later, the Price Anderson Act indemnified contractors in the nuclear industry. Public Law 85-804 was enacted in August of 1958. The Price Anderson Act and PL 85-804 stated that the U.S. would assume the risk of loss to the extent that commercial insurance was not reasonably available.

The Nixon Administration issued an Executive Order which limited the authority of PL 85-804. This modification said that any action taken under the law had to "facilitate the national defense" and the risk must be "unusually hazardous or nuclear in nature." These "tests" of the action are left to the discretion of the agency.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [7]

"Managing a Solution to the Procurement Fraud Problem," Robert J. Kenney, Jr., pp. 19-27.

Contractors need to develop management programs to promote compliance with procurement laws and the standards of conduct. According to the author, "antifraud" compliance is a management problem, not a legal one.

The article offers guidance on the following four topics in developing a compliance model:

- 1) legal consequences of non-compliance
- 2) proper objectives of a compliance program
- 3) preliminary steps in developing a program
- 4) the most important elements of a successful program

PRACTICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[28]

"Confusion of Allowability and Allocability in the 'Pro Rata Share' Provision of FAR 31.203(c)," Aerospace Industry Association Cost Principles Task Group, pp. 29-35.

This article discusses the conflict between the pro rata share provision of FAR 31.203(c) and CAS 405 as they pertain to unallowable costs. FAR 31.203(c) states that all items which can be included in an indirect cost base should bear a pro rata share of indirect costs regardless of their allowability. CAS 405, on the other hand, requires that unallowable costs be separated from allowable costs at the time they are declared unallowable. They would therefore not be burdened with indirect costs before they were disallowed.

The article argues for the deletion of the pro rata share concept in FAR 31.203(c). The two guidelines would then be consistent.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [6]

"Defense Factory Modernization Needs New Contract Cost Accounting and Management Controls," MGen. Joseph H. Connolly, pp. 37-43.

In order for U.S. manufacturing factories to stay competitive in the world market and in the DOD procurement field, they must modernize. Modernization will also mandate changes in accounting and management control systems. The major question is whether measurements used for reporting to the Government are relevant for managing and controlling the performance effectiveness of manufacturing in modern defense factories.

With the development of such technologies as the flexible manufacturing systems (FMS), our accounting systems and measures of effectiveness will need revision. For example, accounting system measurements are based on direct labor. With the onset of FMS technology direct labor is reduced. The reduction in direct labor will cause manufacturing overhead to become higher as a ratio of direct labor cost. We need to develop or use different allocation bases. An example may be FMS operating hours.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [5]

"Assessment of the Competitive Contractor Teaming Acquisition Strategy," Paul M. Carrick, pp. 45-54.

Competitive Contractor Teaming (CCT) is when two contractors compete for a share of each year's production buy after having cooperatively defeated competing teams for a full scale development contract and jointly developing a producible design. CCT was used in the Airborne Self-Protection Jamming (ASPJ) program of the Navy and Air Force. This seemed to be a superior method for introducing a second source.

The author contends that the ASPJ program probably would have been better suited for a sole source procurement. The author states that the CCT is most effective for technically stable products. The ASPJ program was an attempt to push radar technology to the very limits and therefore could not be considered technically stable.

The article continues by stating that the use of CCT can in many instances lead to higher prices. The price reduction

seen in the short run in the FSD and initial production run contracts may be overcome in the long run.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [50]

"Computer Software -- Licensing in the Commercial and Government Environment," Sheryl A. Nudds, pp. 55-63.

Software licensing is a way for a vendor to control the use of his software. A license is a contract by which the vendor grants to the buyer permission to use its software under certain conditions. There are currently two different ways to protect software--trade secret status or copyright. Software is not considered a "good" under the Uniform Commercial Code and therefore a vendor should not grant a standard commercial warranty.

To protect their assets in both the Government and commercial environment vendors are:

- 1) obtaining written acknowledgement from customers that the program being licensed is proprietary.
- 2) placing use restrictions within license agreements.
- 3) clarifying obligations pertaining to the software program through the use of warranties and warranty disclaimers.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [45]

Volume 19, Summer 1985, Issue 1

"The Small Business Sector: Defining and Reaffirming the Federal Role," Congressman Parren J. Mitchell, pp. 1-4.

The Congressman defended the value of small business to the U.S. economy. He cited several bills sponsored by himself to protect and strengthen small businesses.

The author detailed the value of small business to this country and accused the Reagan Administration of a calculated shut out of small business from Government procurement actions. He stated that ignorance of small businesses had engendered noncompetitiveness in the pursuit of Government contracts. He then attributed this anticompetitiveness as the cause for contract abuse and absurd charges to DOD for simple spare parts. The author closed by expressing the belief that SBA was a worthwhile organization and should not be abolished.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [58]

"An Overview of Small and Disadvantaged Business Contracting," Paul J. Seidman, pp. 5-20.

The article first defined small businesses in terms of number of employees and gross sales based on industrial classifications. The author then outlined procedures for filing small business size challenges and solicitation size challenges. He also detailed the advantages afforded a small business, including set asides (traditional set asides, small purchase set asides, and the Small Business Innovation Research program), certificates of competency, special access to bid sets and specifications, and subcontracting requirements on large contracts to large businesses.

The author then detailed advantages of minority owned small businesses including the 8(a) program, SBA contract support for 8(a) firms, advance payments available, and business development expenses allowed some 8(a) firms.

The author concluded that opportunities exist for small businesses but PCO's prefer larger firms which are easier to work with and which often receive non-competitive awards. It is this type of situation that leads to abuse of the procurement system.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [58]

"A Proposal for Restructuring the SBA: Reducing Its Contracting Role and Providing High Technology Assistance to Small Business," Richard J. Lorette, H. Charles Walton, and David F. Dianich, pp. 21-32.

The authors initially cited the high failure rate of new small businesses and pondered whether the current SBA programs build businesses or simply subsidize businesses otherwise destined to failure.

The authors proposed less protectionism and more education of small businesses. They proposed college programs for small business entrepreneurs, including classes on how to start businesses, how to operate them, marketing and promotional methods, and how to navigate the legal and regulatory environment of operating a small business. They wanted to expose small business managers to computers and management information systems. The goal was to make the businessmen competitive.

The authors closed by noting that the Small Business Act policy was to ensure that a fair proportion of Government contracts were placed with small businesses. However, the Act also stressed that the essence of the American economic system

is free competition and this part of the charter is often ignored.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [58]

"Breakout -- The Mystery Unveiled," Donald P. Young, pp. 33-40.

The article defined Breakout Procurement Center Representatives as advocates of competition in procurements. They identify sole source items and identify reasons items cannot be broken out for competitive procurement. .

The author recounted the history of breakout efforts and the importance of breakouts--they improve competition and yield lower prices. Finally, the author identified and presented solutions to some common breakout problems: pre-qualification of additional sources, identification of additional sources, and availability of the technical data required to compete.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [43]

"Small Business and the Government Contract: Will Your Trade Secrets Stay Secret?" Irene M. Guimera, pp. 41-46.

Though the title addressed small businesses contracting with the Government, the subject matter concerned all Government contractors. The article detailed concerns contractors have when trying to protect trade secrets and proprietary information when dealing with the Government.

The Government requires the contractor to provide a great deal of this information for negotiations and for logistics support at a later date. The author stated that Government contracting does not mean a contractor must sacrifice all rights in trade secrets. The contractor should, however, understand what he must do to safeguard this information (e.g. stamping information proprietary, identifying data provided to the Government with limited rights, and considering use of an agreement called a predetermination of rights in data).

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [45]

"The New Bid Protest Remedies Created by the Competition in Contracting Act of 1984," George M. Coburn, pp. 47-60.

The article summarized and compared GAO and GSBCA bid protest remedies under CICA. Under CICA, a GAO protest stopped performance if award had been made as of the time of protest. CICA also required GAO to provide a decision more quickly.

Protests to GSBCA with the advent of CICA resulted in temporary suspension of the Agency's delegation of procurement authority (DPA).

CICA also established new grounds for bid protest, including: failure to follow proper synopsis procedures, failure to seek full and open competition, and failure to comply with statutory restrictions on establishing bidder qualification requirements.

Based on the belief that CICA delegated executive powers to the legislative branch of the Government (in the form of the Comptroller General) and was thus unconstitutional, the executive did not abide by CICA bid protest rules until six months after they had become effective.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [22]

"National Security and Economic Concerns of International Technology Transfer," James C. Savage III, pp. 61-73.

Technology transfer has been a problem since the Philistines kept an iron smelting process secret from the twelve tribes of Israel.

The author stated that the United States is ahead of Russia in most technology. However, the Soviets save billions of dollars in research and development by using U.S. technology. Of the U.S. technology they obtain, seventy percent is stolen and thirty percent is obtained by legitimate means.

The technology transfer has not only military, but also economic consequences. The technology costs U.S. industry billions, but the return is diminished by the transfer. The author believed the solution was not to lock the technology away. The value of the technology would then disintegrate. It must be circulated and used so it can grow.

The article cited progress in control of technology transfer by the Reagan Administration. The Administration clamped down on arms sales to other countries (a form of transfer), transfer of commercial technology, and more closely regulated scientific exchange. However, more progress is needed.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [63]

"The Decline of the Bid Protest Remedy in the Federal Courts Since the Federal Courts Improvement Act of 1982," George M. Coburn, pp. 1-9.

This article analyzes the problems the language of the Federal Courts Improvement Act of 1982 caused relative to the jurisdiction of the U.S. Claims court to grant relief to disappointed bidders. The Act gave the Claims Court exclusive jurisdiction to grant judgments on any contract claim brought before the contract is awarded. The language of the Act raised a number of questions over not only the Claims Court jurisdiction but also of other courts, like the district courts.

The article does state that there seems to be no clear intent on the part of Congress to distinguish for jurisdictional purposes between pre-award and post-award protest or to confine the post-award protests to suits in this district courts. It also finds that the Act did not diminish the bid protest jurisdiction of the Federal district court in suits filed after contract award.

The article points out the need for legislative reform to provide clarifications to the jurisdictional questions. The article addressed proposed administration revision to the Act.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[22]

"Five Ways to the Merits: Some Suggestions on Seeking Expedition Resolution of Contract Dispute Litigation," Donald P. Arnavas, pp. 11-20.

There are a number of different forums available for the adjudication of contractual disputes and disagreements. A backlog of cases is typical for all of the forums. The largest Board of Contract Appeals (BCA), the Armed Services Board of Contract Appeals (ASBCA) faces the rising number of cases at the same time the average amount of time consumed per case increases.

The article concentrates on the BCA appeal procedures and discusses the five principal methods available to contractors seeking review of the merits of their contract disputes.

The five methods of resolving disputes discussed are:

- 1) motion for summary judgement
- 2) decided "on the record"
- 3) expedited proceedings

- 4) accelerated proceedings
- 5) full hearing

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [40]

"Government Access to Records and Personnel," James J. Gallagher and Janice Davis, pp. 21-30.

The controversy over the scope of access granted to DCAA auditors has heated up since the creation of the DOD Inspector General (IG) position. The IG pressured DCAA auditors to demand complete unrestricted access to contractor records. If the contractors refused, the DCAA simply stopped payments to the contractor under cost-reimbursement contracts.

The article presents a review of contractual and statutory powers providing the means to compel contractors to provide cost records and access to personnel.

The article then discusses the main points in a Westinghouse case where Westinghouse defended against the DOD's subpoena mandating release of corporate work papers and internal audits and the contracting officer's disallowance of costs associated with the company's internal audit activity.

The authors provide a recommended plan for corporate managers to use to keep auditors within their legal rights. They provide a brief outline of their "government access management plan." The article concludes with an appendix outlining documents commonly requested and audits usually conducted by the Government.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [47]

"The Access to Records Offensive: The DCAA as Investigator," Patrick D. Mirch, pp. 31-35.

In this article, Mr. Mirch takes the Government's position and addresses the DCAA's access to records rights in its role as a financial advisor to the contracting officer. The author hopes to dispel any concerns about the DCAA auditors's role as an investigator.

The article defends the auditor's need to review internal audit records, including budgets, forecasts, and tax returns and SEC filings. He substantiates the need for floor checks and employee interviews by stating that labor mischarging is the number one reason for DCAA referrals to the Defense Criminal Investigative Service. The article lists remedies available to DCAA auditors who are denied access. The conclusion is that the auditor's job is not that of an

investigator but rather of reporting facts for further investigation.

PRACTICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE [47]

"A Decision Analysis Framework for a Contractor-Operated In-Plant Store," Richard A. Reid, Carl F. Huth, and Dennis A. Roybal, pp. 37-47.

Opportunities to contain costs and improve productivity in Government agencies may be available by contracting with private sector firms to operate in-plant common use commodity stores, IPS's (in-plant stores). The use of an IPS can produce significant cost savings in the areas of procuring, storing, and issuing inventory.

The article presents a decision analysis framework for use in evaluating the feasibility of implementing the IPS concept at a Government facility. The four stages of the decision analysis framework are described. The viability of the IPS is illustrated by giving an example of an IPS at a R&D facility. Finally, the managerial implications associated with the decision framework are described.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [64]

"The DOD's 'Rights in Technical Data and Computer Software' Clause," Maj. Jerome S. Gabig and Roger J. McAvoy, pp. 49-55.

This article examines the DOD's "Rights in Technical Data and Computer Software" clause DFARS 52.227-7013. According to the article, this clause conflicts with the license agreements that are customarily used within the commercial sector of the software industry.

The article describes the four categories of data rights in the clause and gives a flow chart explanation for when each of the four is applicable.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [45]

"Return on Assets/Investment Considerations for Contract Managers," William D. Chisholm, pp. 57-66.

The purpose of this article is to provide a list of factors and actions which may affect a company's Return on Assets (ROA) or Return on Investment (ROI) throughout the life cycle of the contract manager's activities. The article explores the opportunities which exist to directly influence

profit from the proposal preparation stage to the contract closeout.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [7]

Volume 20, Summer 1986, Issue 1

"Congress and the Acquisition Process: Some Recommendations for Improvement," Colleen A. Preston, pp. 1-25.

This article is an examination of the effects of Congressional legislation on the acquisition process. Ms. Peterson first reviews each of four acts of Congressional legislation. They are: 1) the Competition in Contracting Act, 2) the Defense Procurement Reform Act, 3) the Small Business and Federal Competition Enhancement Act and finally 4) the Defense Procurement Improvement Act. The purpose, implementation and problems of each are addressed. An analysis of Congressional intervention into the procurement process is presented. The author believes that although changes in the DOD acquisition policies were overdue, that it's now time to examine the impact of the changes.

The author concludes by making specific recommendations which would begin the process of disengaging Congress from the day to day management of the DOD and regulation of defense contractor performance.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [24]

"Debarment, Suspension, and Present Responsibility," BGen Norman R. Thorpe and LCol Robert L. Schaefer, CPCM, pp. 27-34.

It is not in the Government's best interest to refuse to contract with a responsible contractor or to contract with a nonresponsible contractor. The definition of responsibility includes not only the ability of the contractor to complete a contract successfully, but also the honesty and integrity of the contractor.

Debarment and suspension are both very serious actions. Debarring a contractor may equate to capital punishment for a business, affecting not only employment, but in some cases, the welfare of the entire community. This article discusses the causes for which a contractor may be barred or suspended. It also addresses the burden proof required for each. The article discusses the concept of "present responsibility".

The purpose of debarment and suspension is to protect the Government. It is discretionary. The review boards considering

these cases have a broad amount of power and it is imperative that the debarring official use sound judgement on each case.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [24]

"Limiting Cost Recovery: Significant Legislative and Regulatory Developments," Stephen D. Knight, pp. 35-47.

The Fiscal Year 1986 DOD Authorization Act poses problems not only for the contractors but also for Government procurement personnel. The Act was drafted in response to well publicized charges of procurement abuse such as charging country club memberships to Government contracts.

The Act can be claimed as the major impetus behind sweeping changes in FAR cost principles. This article listed the Act's effects and the effects of other legislative and regulatory changes on the cost principles in FAR part 31.2. It also examines DCAA's expanded role in establishing overhead rates.

In light of the current scrutiny of the allowability of costs, the article also discusses pending fraud related legislation.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [47]

"The Legislative Mandate to Revise the Cost Principles," Chester D. Taylor, Jr., pp. 49-53.

This article is a discussion of Congressional involvement in the procurement process, specifically in the reform of cost principles. This involvement is based on the lack of trust Congress has in the DOD's ability to regulate and administer cost reimbursement issues.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

"Recovering IR&D/B&P Costs," Frank M. Alston, pp. 55-59.

Contractors are limited in the amount of independent research and development (IR&D) and bid and proposal (B&P) costs they can recover in negotiated Federal contracts. This article discusses the difficulty in distinguishing between IR&D costs and costs associated with concurrent R&D contracts. Questions arise as to when exactly IR&D ends and production of a marketable product begins.

The article also addresses the difficulty of distinguishing between B&P costs and selling expenses.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [6]

"The Small Business Administration's Pilot Program: A Study in Frustration," John F. Magnotti, Jr., Ph.D., pp. 61-65.

The article begins with a history of the creation of the Small Business Act and the SBA's Office of Minority Business Enterprise and the 8(a) program. Public Law 95-507 which became law in October 1978 established a pilot program for the Army in which the SBA had increased authority over selecting requirements for the 8(a) program. Basically, in this program the SBA had exclusive unilateral authority to select and reserve any procurement requirement for use. The article gives a specific example of the failure of this program.

The author concludes that mandating programs like the 8(a) pilot and the 8(a) program itself will not work until we are successfully able to incentivize enthusiastic compliance by large companies.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE [58]

"The Differing Site Conditions Clause: What Are 'Contract Indications'?" George D. Ruttinger, pp. 67-75.

This article addresses the Differing Site Conditions Clause. The clause is primarily a risk allocation clause used in construction contracts to protect the contractor from unexpected site conditions. Basically, the clause provides for price adjustment in a contract if the contractor encounters "subsurface or latent physical conditions at the site which differ materially from those indicated in the contract" or if "unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract." The article primarily discusses the former case.

The author attempts to define by court citations those types of things that constitute contract indications for purposes of the clause. Addressed are physical data, design details, site investigations, and publicly available information.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [66]

"The 'New Morality' Environment in Government Contracts," C. Stanley Dees, pp. 1-14.

The author claimed the environment in Federal contracting was changing. More contractors were being debarred and suspended. There were more criminal investigations and prosecutions as well as more legislation to enhance the Government's ability to detect and punish procurement fraud. He cited three reasons: the growing deficit and the reduction in Federal spending, the growth of inspectors general and their need to justify their existence, and the growth of fraud or other improper activities by some contractors.

The author examined particular problem areas including materials management, labor mismanagement, defective pricing, product substitution, kickbacks, collusion, and conflicts of interest. He also examined the recent legislation enacted to prevent such problems, including the DOD 1986 Authorization Act, the Fraud Civil Remedies Act, the False Claims amendment Act, and the Anti-Kickback Enforcement Act of 1986.

Finally, the author addressed the use of contractor self governance recommended by the Packard Commission to prevent procurement fraud problems. This involved a firm establishing its own standards of conduct, conducting internal audits and performing the independent oversight function. The author concluded that contractor self governance was the only solution that would really work.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [54]

"Ethics in Government Contracting: Putting Your House in Order," Rafael Mur, pp. 15-50.

The author, Vice-President and General Counsel for Grumman, described the evolution of the "Grumman Code of Business Conduct." In the article, he reviewed the DOD Inspector General document titled "Indicators of Fraud in Department of Defense Procurement" of 1984.

The author cited the key elements of a compliance program and the value of self governance. He also discussed the causes of Grumman's evolving Code of Business Conduct--increasing audits, changing regulations, and more frequent defective pricing cases. Grumman code was included as an appendix.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [54]

"An Economic Prescription for Defense Profit Policy," G.R. Simonson, pp. 51-66.

There were three sections to this article. The author first described the existing DOD profit policy (cost based with partial incentive to invest in capital equipment). He maintained that since under weighted guidelines, the majority of profit is cost based and only a fourth is based on capital equipment investment, it does not make sense for a contractor to invest to improve production. That would ultimately reduce profit.

Second, the author measured profitability of defense production and compared it to that of durable goods production. He found that durable goods manufacturers employed 2.5 times as much facilities capital to sales as DOD firms. Further, the DOD ratio of facilities capital employed to sales was .129 while the ratio for durable goods manufacturers was .232. He concluded that not only had weighted guidelines profit policy resulted in excess profit rates on capital, but it had also been unsuccessful in its attempt to increase investment in line with that of durable goods manufacturers.

The third section of the article recommended basing weighted guidelines profit one hundred percent on capital investment employed, thus eliminating cost based profit and truly encouraging new investment.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[46]

"The Competition in Contracting Act -- A Marketing Tool," John K. Callahan, Jr., and Dr. Carl Vest, pp. 67-78.

At first glance CICA may appear to restrict the marketing efforts of contractors. Contact between Government and contractor personnel is severely restricted during certain stages of the buying process. However, closer inspection reveals many marketing opportunities under CICA.

There are three phases of the acquisition process--problem recognition, assignment of buying responsibility, and search for and choosing of a contractor. The phase most susceptible to political influence in the form of promotion (particularly personal selling) is the problem recognition phase. CICA seeks to foster competition based on merit focusing primarily on the final phase.

The CICA provision requiring that agencies use advance planning and market research before making purchases provides many new marketing opportunities. CICA also requires J&A's to justify non-competitive procurements. The J&A's require market surveys and this provides another marketing opportunity.

CICA put negotiation on an even footing with sealed bidding. In so doing, CICA allowed for consideration of

factors other than price in source selection. This is another factor enhancing the use of marketing efforts to obtain award.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [30]

"Cost and Pricing Data Defined: An Analysis of the Scope of Contractor Disclosure Requirements Pursuant to the Truth in Negotiations Act," Jeffrey A. Lovitky, pp. 79-86.

The author described the submission requirements of the Truth in Negotiations Act with regard to cost and pricing data. He described what constitutes cost and pricing data in material, labor, and overhead categories.

The author then detailed defective pricing possibilities for defective cost and pricing data. He reviewed several case histories to illustrate defective pricing in material, labor, and indirect cost areas.

Finally, the author concluded by recommending contractors submit when in doubt as to whether something qualified as cost and pricing data.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [42]

"An Evaluation of Federal Contract Set-Aside Goals in Reducing Socioeconomic Discrimination," Dennis E. Black, pp. 87-104.

The author examined the policy of pursuit of socioeconomic goals through the Federal contracting process. He pointed out the inefficiency: dollars could be better spent and procurement would be easier and cheaper. He did acknowledge the social value of set asides and preferences. He claimed a major reason for the use of the contracting process as a means of addressing past discrimination was that Congress did not have to explicitly fund the program.

The author then explained how the set aside goals are set. He listed nine reasons for predicting failure in implementing Federal goal setting policy. They included: vague and ambiguous legislation, difficulty in quantifying output/success, incompatibility with "best produce" or minimum need at the lowest price, and no incentive or enforcement mechanism.

The author concluded by recommending discontinuance of the Federal contracting goal setting procedure.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE

[57]

"The Defense Industry: An Illusion of a Free Market," LCol Blair A. Peterson, CPCM, pp. 105-112.

The author claimed that the defense industry is not the free market it is often conceived to be. He noted there is only one customer (monopsony) and a limited number of suppliers (oligopoly). Congress often legislates under the assumption of a free market when that in fact may not be the case.

Most DOD dollars go into major systems where competition is often quite limited. DOD cannot wait until competition develops to buy their goods. It is expensive to create competition in major systems by bringing additional sources on-line. The other alternative the author cited was to realize one is dealing with a non-competitive market and make the best of it.

The author concluded that Congress and the American public do not understand the true nature of defense contracting and they compare firms in this environment to those in a retail environment. Increased legislation is not required, but an understanding of the defense contracting environment is.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [50]

Volume 21, Summer 1987, Issue 1

"MRP and Government Contract Costing: Are They Compatible?" Norma C. Holter, CPA, pp. 1-10.

The author defined and explained Material Requirements Planning (MRP) as a planning tool for managing inventories according to production schedules. He then cited deficiencies that DCAA has noted in MRP systems with regard to accurate cost accounting.

Deficiencies noted by the author included transferring material from one contract to another without ACO approval, improper progress payment requests, inaccurate cost schedule control system cost reporting, and inaccurate costs being charged to contracts.

The article concluded that while strides are being made to improve the manufacturing process, in this specific case with MRP, basic accurate costing controls must continue to exist. Effort must be expended by Government and industry to make manufacturing efficiency and cost accounting controls compatible. The goal is achievable.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [7]

"Mission Support Pricing -- Telling the Whole Story," R. Dean Golden, pp. 11-22.

This article detailed the actions the Air Force Logistics Command (AFLC) took to improve spare parts pricing. The author first gave background of publicized spare parts pricing problems and then explained how the apparent mispricing occurred. These problems stemmed from difficulties with cost allocation, limited purchase quantities, buys through a prime incurring a pass through charge on the subcontractor's price, errors, and defective pricing.

Solutions offered by the author to these problems included increasing competition, increasing manpower assigned, reverse engineering, obtaining of data rights to manufacture in-house or break out for competition, obtaining industry cooperation, improving acquisition planning, and improving pricing techniques.

Finally, the author concluded by citing demonstrated improved performance at AFLC as evidence of the effectiveness of the proposed solutions.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

"Congressional Dynamics of the Military Reform Caucus," Col Timothy P. Malishenko, CPCM, pp. 23-34.

The military Reform Caucus (MRC) is a bicameral ad hoc caucus formed in 1981. Membership is voluntary. The caucus was organized to enable junior members of Congress to lead, publicize issues, build coalitions, and generate personal visibility on military issues without having membership on the relevant committees. It is particularly difficult in the House to become a member of a committee and influence defense policy because there are so many members and relative few committees. The MRC provides the avenue without establishing membership on a committee.

Members of DOD should recognize the existence and importance of the MRC. DOD should not focus only on the Armed Services committees in dealing with Congress. DOD should understand the institutional factors at work in Congress and realize that committee membership is not the only indication of a Congressman's interest. Also, membership in the MRC does not indicate a member's opinion or position with regard to DOD.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [24]

"Loss of Manufacturing Sources: An Analysis of Alternative Solutions," David V. Lamm, CPCM, and Elizabeth A. Tracy, CPCM, pp. 35-44.

The authors developed a model for selecting alternative solutions to loss of a key manufacturing source. They first noted the reasons that manufacturers stop producing items, including financial difficulties, uneconomical production rates, and obsolete technology.

The authors then discussed solutions in four categories: source solutions, engineering solutions, system solutions, and stockpile solutions. Advantages and disadvantages of each solution were detailed.

Finally, the authors presented their model for selecting the best solution. The model is a matrix and selection of the best solution relies on the manager's determination of the quantity required, the complexity of the item, its cost, the stability of design, and the time available in which to make the decision.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [11]

"The Prompt Payment Act in 1987: Collecting From Uncle Sam," Robert A. Donally and Mark W. Stone, pp. 45-56.

The Prompt Payment Act of 1982 was enacted to encourage the Government to pay its bill and pay them on time. Delinquencies hurt small businesses and discourage companies from doing business with the Government. With the Prompt Payment Act of 1982, the Government began paying interest on late payments (defined as thirty days after an invoice is received, with a fifteen day grace period). DOD then decided that they had forty-five days in which to pay bills--not the Congressional intent. Now, the Prompt Payment Act of 1987 has arrived. Its provision include: phase out of the fifteen day grace period, application of the Act to construction contracts, and provision for automatic payment of interest (vice the previous policy of payment only on request). The underlying cause for the new legislation is that the Government still does not pay its bills promptly.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[7]

"Understanding the Submission Requirement for Cost or Pricing Data," Jeffrey A. Lovitky, pp. 57-65.

Under the Truth in Negotiations Act, cost or pricing data must be submitted on all negotiated contract actions greater than \$100,000 unless certain exemptions apply. The law covers civilian agencies as well as DOD. The contractor must certify the factual data as current, accurate, and complete as of the date of agreement on price. Submission of raw data does not meet the submission requirement. The data must be organized and indexed to put the Government on equal footing with the contractor in negotiations. All significant data must be brought to the PCO's attention. The article also covered the case law surrounding submission of cost of pricing data and the manner in which case law has interpreted the Truth in Negotiations Act.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [46]

Volume 21, Winter 1988, Issue 2

"The Agendas of the Office of Federal Procurement Policy," Robert P. Bedell, pp. 1-8.

The Office of Federal Procurement Policy (OFPP) was created as part of the Office of Management and Budget (OMB) in 1974. The authors addressed some of OFPP's new programs designed to establish Government-wide procurement policies and implement the recommendations of the Packard Commission. The OFPP's main accomplishment in its first twelve years was its publication of a single set of Government-wide procurement regulations, the Federal Acquisition Regulation (FAR). However, many agencies developed their own supplements to the FAR, somewhat defeating the objective of a single Government procurement regulation. Also, the Paperwork Reduction Act was being implemented at the same time the FAR was being developed. As a result, procurement was excluded from the Act.

New initiatives of the OFPP are to approve and disapprove paperwork in the procurement process, redefine the procurement regulation development process, simplify Government-wide regulatory policies, and rescind overly burdensome regulations.

THEORETICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [23]

"Corporate Criminal Liability of the Public Contractor -- Are Guidelines Needed?" James J. Graham, pp. 9-20.

Federal criminal laws are now being applied to corporations. Corporations are criminally liable for acts and statements of their employees/agents accomplished to benefit the corporation and within the scope of their employment. Now, in accordance with the recommendations of the Packard Commission, DOD is encouraging contractor self governance and disclosure of the results of self review.

DOD guidelines allow consideration of self reporting as a mitigating circumstance in suspension and debarment procedures. The belief is that a public contractor acting as a "good citizen" should not bear the same wrath incurred by a non-self reporting contractor.

The author concludes that the Department of Justice should establish similar guidelines to take these factors into account when considering criminal proceedings.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE [54]

"How Contractors Can Minimize the Risk of Becoming 'Federal Actors'," George M. Coburn, pp. 21-36.

The reference to becoming a "Federal Actor" refers to contractors violating the constitutional rights of employees to comply with requirements levied on them in performance of Government contracts. The Supreme Court has established tests to determine when private parties become state actors. Tests include the public function test, the state compulsion test, and the joint action test. However, the court has yet to formulate an all-encompassing test to determine when a private action should be attributed to the state.

Dangers of becoming a Federal actor stem from the fact that Federal officials may be liable for damages in violation of a citizen's rights. If a contractor is found to be a Federal actor, this liability extends to him. The author cited several cases in support of this point. A particular area where contractors become Federal actors is under DOD's Voluntary Disclosure and Present Responsibility Programs. A contractor may become a Federal actor in conducting internal investigations of Federal procurement law violations.

To minimize risks of becoming a Federal actor, the contractor should show regard for the employees' rights not to be treated adversely without just cause determined by fair procedure. Contractors should deal with violations within the company and to disclose to the Government only actions taken, not details of the employee investigations. This will improve

contractor self governance and reduce a contractor's liability for constitutional transgressions as a Federal actor.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[54]

"The DOD's Rights in Technical Data and Computer Software Clause--Part II," Maj. Jerome S. Gabig and Roger J. McAvoy, pp. 37-44.

This article was written due to noteworthy changes in the Department of Defense Federal Acquisition Regulation Supplement (DFARS) clause Rights in Technical Data and Computer Software. In determining rights in technical data, new law requires consideration of how the data were developed--private expense, Government expense, or a combination. It also requires consideration of a benevolent policy toward small businesses and non-profit organizations.

The authors developed a flowchart to derive the Government's minimum rights under a procurement covered by the rights in Technical Data and Computer Software clause, DFARS 52.227-7013 (May 1987).

The authors defined unlimited rights, limited rights, restricted rights of two types, and Government purpose license rights. Technical data is placed in one of these categories depending on the commerciality of the item, whether or not it was developed at private expense, and whether the data were published in the public domain.

Due to the numerous categories and the importance of rights, it is vital to closely monitor the allocation of intellectual property rights in any DOD contract requiring the delivery of software or technical data.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [45]

"Why Firms Refuse DOD Business: An Analysis of Rationale," David V. Lamm, CPCM, pp. 45-56.

When firms are unwilling to participate in DOD acquisitions, the defense industrial base is seriously affected. This article reported the results of a study to determine why companies do not want DOD business. The author hopes the reasons will be considered by DOD PCO's in making daily procurement decisions.

A survey was sent to 1317 firms. Responses were received from 427. The study focused on the 213 of the 427 which either did not want DOD business or wanted the business but were dissatisfied with the procurement process. The goal of the study was to identify reasons for the dissatisfaction.

The greatest causes of dissatisfaction identified were burdensome paperwork, the Government procurement process (primarily pre-award), inflexible policies and regulations, and low profitability compared to commercial ventures. Problems causing the least dissatisfaction included Government Furnished Equipment (GFE) problems, adverse court or board rulings, adverse GAO decisions, and terminated contracts.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[24]

"Defense Profit Policy," Barry J. Shillito, CPCM, and David Westermann, CPCM, pp. 57-66.

This article responds to an article by Professor G.R. Simonson titled "An Economic Prescription to Defense Profit Policy" in Volume 20, Winter 1987, Issue 2 of the *National Contract Management Journal*.

The Simonson article espoused interest as an allowable cost, abolition of progress payments, profit based strictly on capital employed, and a return of 25% on net worth before taxes. In arriving at these conclusions, Simonson compared defense industries to durable goods manufacturers.

The authors of this article questioned the validity of a comparison of defense contractors to companies in the durable goods industry. They questioned a profit system based only on capital employed for several reasons. They asserted that talent, labor, management, and risk should all contribute to profit. They believed progress payments to be a more cost effective means of contract financing than allowing interest expense since the Government can borrow more cheaply than contractors.

The authors concluded that consequential changes in profit policy should not be made without thorough study of the possible impact. Efforts should be made to compare defense contractor profits to those of non-defense companies. The Government should provide incentives to well managed companies to compete on the basis of other than price for a significant portion of defense business. Let companies manage their assets themselves.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[46]

"The Truth in Negotiations Act: A Primer," Steven W. Feldman, pp. 67-81.

The Truth in Negotiations Act (TINA) was passed to ensure the Government obtains fair and reasonable prices by requiring contractors to disclose all known facts during negotiations that could reasonably be expected to have an impact on price negotiations. TINA requires contractors provide cost or pricing data if contract award is expected to exceed \$100,000. It also applies to modifications if changes are expected to exceed \$100,000. The article lists exceptions.

As of the time of agreement on price, the contractor must certify that all cost or pricing data is current, accurate, and complete. The penalty for defective pricing is severe. If the cost or pricing data is not current, accurate, and complete and the PCO relies on it, the PCO can reduce the amount of the contract.

Both PCO's and contractors must understand the Act because of its substantial potential financial impact.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [42]

Volume 22, Summer 1988, Issue 1

"Auditors and Investigators: Some Legal Ramifications of the Blurred Distinction Between Criminal and Civil Investigations," Brian C. Elmer and Alan W.H. Gourley, pp. 1-8.

Traditionally auditors have been concerned with civil law--the law of torts and of contractual matters. Investigators, on the other hand, have dealt traditionally with conduct that society in general does not tolerate. The two are governed by different rules, different courts and different goals. The creation of Inspector General changed all of that. Now both auditors and investigators are mixed in a single organization combining both civil and criminal responsibilities. The Government is attempting to use every legally permissible means to detect fraud, waste and abuse in the procurement process.

This article discusses the gray areas created by the blending of the two responsibilities. It addresses the fact that some of the rights the U.S. Constitution protects in criminal proceedings may be circulated during audit proceedings. Specifically, the article addresses the Fifth Amendment Right of self-incrimination, the Sixth Amendment Right to counsel, the Fourth Amendment Right against unlawful

search and seizure, the right to privacy and the threat of criminal prosecution to get civil remedies.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE [47]

"Government Progress Payments Can Be Tricky Business -- Seeking Reimbursement of Payments to Subcontractors," Stuart B. Nibley and Sandra Lee Fenske, pp. 9-23.

This article is basically a case study of a contractor who was suspended for five months and subjected to a long investigation for possible prosecution on civil and criminal false claims because his interpretation of the SF 1443 (or DD 1195) differed from the Government's. The company had been processing its progress payments requests in the same manner for five years. During that five year period, the contracting officer and the DCAA representatives had approved each request. The Government claimed that the contractor had wrongly included in its requests progress payments paid to its subcontractors between the contractor's monthly accounting cost cutoff dates (Section II on the form) and the dates it submitted the requests to the Government for payment (Line 8B on the form).

The article basically supported the contractor's position. The outcome of the case was that the contractor paid a substantial amount in settlement of the alleged civil and criminal false claims, no indictment was ever issued and the suspension was lifted. The contractor agreed to change the way it processed its DD 1195's. The article advises contractors to "revisit their respective interpretations of the instruction governing the submission of progress payment requests to Government agencies."

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [7]

"Validation of Proprietary Data Restrictions: How Contractors Can Protect Their Rights in Technical Data Against Government Challenge," Douglas R. Duberstein, pp. 25-32.

Procurement agencies now have the authority to challenge a contractor's claim that technical data supplied to the Government is subject to limited rights. In other words, to enable the Government to disclose data the contractor claims is proprietary. This right to challenge is known as the validation procedure. At the time the article was written, there were two separate sets of regulations, one for civilian agencies and one for DOD. Civilian agencies try to balance between the need for data on the Government's part and the contractor's legitimate proprietary rights. Civilian

regulations discuss two types of technical data rights: unlimited and limited. Limited rights data include trade secrets, commercially privileged information or data developed at private expense. The Government can only use limited rights data inside the Government and cannot disclose the data to the outside without contractor approval.

The DOD policy on data is to require the minimum level necessary to meet the Government's needs. The DOD adds a third type of data rights called Government purpose limited rights. This type of limitation permits disclosure for Government purposes, including disclosure for competitive procurement but not for private manufacturing. This is usually the case when data is developed at both Government and private expense.

The article went on to discuss the validation procedures for both the civilian agencies and the DOD. It also described procedures that are followed in directing the loser of a validation challenge to offset the winner's costs. Some examination was also made into the judicial review procedures if a contractor wishes to obtain a review of a contracting officers adverse decision.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE

[45]

"Task Order Contracts: Popular, But Are They Legal?" Peter J. Ritenberg, pp. 33-45.

This article questions the legality of what the author refers to as task order contracts. Task order contracts are indefinite delivery contracts (IDC's). The issue is whether these indefinite arrangements are contrary to the concept of "full and open competition" mandated by CICA.

A comparison is made between IDC contracts and basic ordering agreements (BOA). BOA's are not contracts but agreements and therefore in accordance with FAR, require synopsis and competition of each action.

The author states that the GAO appears to have changed its pre-CICA view of IDC's. According to the article, pre-CICA IDC's were borderline legal in the eyes of GAO. Post-CICA GAO does not seem to have the same opinion. The article continues by discussing GAO's expressed reservations about unpriced options. This opinion is irreconcilable with the GAO's opinion on IDC's.

Ritenburg concludes with a list of possible questions involving IDC's that should be addressed and urges prospective offerors to protest the next solicitation for a task order contract as "violative of, or at least outside, Federal procurement law and regulations."

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[33]

"Measurement of Defense Profit," G.R. Simonson, pp. 47-53.

Simonson states that in contradiction to the DFAIR study published in 1985, defense contractors are receiving a rate of return on defense capital above that of non-defense producers of durable goods. He states that the weighted guidelines method of calculating profit on mostly production costs has been primarily responsible for the exceptionally high profit rates experienced by DOD contractors.

According to the article, the measurement of defense profit used in the DFAIR study is misleading and incorrect. First, the study used figures between 1970 and 1979 instead of 1970 and 1983, the period covered by the study. Second, the study used what it called economic profit, not operating profit. Economic profit includes operating costs plus the implicit costs of foregone income. Third, the calculations in the study used economic profit-to-total-assets rate instead of operating profit-to-total-assets less progress payments.

The author concludes by stating that defense contractors were receiving extraordinarily high profit rates which means that taxpayers are paying too much for defense hardware. He recommends that DOD review its weighted guidelines profit policy and shift the emphasis from the production cost to value of capital employed by the contractor.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [7]

"Pathways and Pitfalls for Small Business: Federal Procurement Socioeconomic Programs," Bingham Kennedy and Barry J. Trilling, pp. 55-64.

There are a number of socioeconomic programs affecting Federal procurement. Some are designed to assist small businesses, such as the set aside program and the SBIR program. Others restrict or eliminate small business opportunities, such as the Federal Prison Industries, the Javits-Wagner-O'Day Act program for the blind and severely handicapped, and the Industrial Preparedness Planning Program which in times of national crisis would waive requirements to set aside procurements in the interest of national defense.

This article defines small business as it relates to both supplies and services. It then continues with descriptions of many of the programs currently in effect.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [58]

"Government Furnished Property: Government Furnished Problems," Terrence M. Cleary, pp. 1-8.

Contractors must normally furnish all material and equipment necessary in performance of Government contract work. However, it is at times cost efficient for the Government to provide property for the contractors' use. This is Government Furnished Property (GFP). This article also considers material to be GFP. Material is property that may be incorporated in or expendable in production of the end item.

Contractors are required to account for GFP, maintain it, segregate it from contractor property, and inventory it.

Most problems with GFP stem from failure of the Government to deliver it, late delivery, or delivery of GFP which is unsuitable for the use for which it was intended. The government cannot be found in default for these deficiencies. However, contractors are entitled to delays and equitable adjustments based on problems with GFP.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [64]

"Suspension and Debarment of Government Contractors: The Current Climate," David M. Nadler, pp. 9-16.

The Government is becoming increasingly aggressive in suspending and debarment contractors suspected of engaging in improper conduct. A contractor can be suspended for a period of a year or less for "adequate evidence" of fraud or a criminal offense in obtaining, attempting to obtain, or performing on a public contract, violation of anti-trust laws relating to the submission of offers, theft, embezzlement, forgery, bribery, or falsification of records, violation of the Drug-Free Workplace Act of 1988, or commission of any other act indicating lack of business integrity.

Debarment occurs when a contractor is convicted of any of the above offenses.

Suspension and debarment are not penalties, but ways in which the Government executes its obligation to protect the public interest.

Until recently, a global settlement could be reached with DOD

and the Department of Justice (DOJ) to avoid suspension and debarment by resolving civil, criminal, and administrative allegations in a single comprehensive agreement. Now, DOD and DOJ do not agree to global settlements. If someone plea bargains with DOJ, he is still liable to suspension and debarment procedures through DOD, he is still liable to

suspension and debarment procedures through DOD. Congress believed that DOJ's willingness to accept global settlements interfered with DOD pursuing defense contractors illegally obtaining Government funds.

The author concluded that contractors should do everything in their power in terms of self governance to ensure corporate integrity. Also, DOD must keep in mind that suspension and debarment procedures are not punitive measures and DOD should exercise restraint. These procedures should be used only to protect the Government's interests.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE

[24]

"Are Defense Industry Profits Excessive? A Capital Market Perspective," Maj. Jeffrey A. Sorenson, pp. 17-36.

The House Armed Services Committee (HASC) recently cited high profit margins for defense contractors in 1984. However, the HASC failed to make the connection between profitability and risk. For the amount of risk they take, these profit margins were not excessively high.

The author examined profitability in terms of the Capital Asset Pricing Model (CAPM). This is a model designed by investment analysts to determine required rates of return given the systematic risk of a company. The systematic risk is quantitatively measured as beta which represents the variability of the firm's stock price relative to the market price.

The author's application of CAPM analysis to large defense contractors indicated that the securities of the entire defense industry underperformed the market for the entire period of analysis (1981-1986). The only exceptions occurred in 1982 and 1984. While HASC may believe profit margins were excessive during this period, investors in the capital markets disagree.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[7]

"The Impact on Defense Industrial Capability of Changes in Procurement and Tax Policy, 1984-1987," The MAC Group, pp. 37-66.

From 1984 to 1987, Congress and DOD instituted a number of major statutory, regulatory, and management changes. Very little was done to assess the impact of these changes nor their combined impact.

The study focused on cost sharing on new development programs, the new DOD profit policy, lower progress payment rates, special tooling investments, tax law changes, and lower

cost recovery. The MAC Group took the significant changes in these areas and applied them retroactively to nine DOD contractors. They then compared the actual results of the programs to the retroactively constructed results.

Analysis of the two sets of data led to conclusions under the new regulations including: ROI would have been less than that necessary to maintain shareholder value; profits would have been reduced by an average of 23% on companies' defense business; companies would have had to borrow heavily, probably more than they would have been granted; companies would have had to reduce R&D funding and opt for low technology alternatives; the impact of changes would first become evident among subcontractors.

Implications to national defense include loss of technology growth and leadership, less efficient industry (less capital investment), less competition as weaker companies leave industry, and less competitive industries in the face of foreign competition.

Recommendations included development of a coordinated policy (not the current piecemeal approach), limitations on single purpose regulations, and provision for incentives for investment. Finally, complete impact assessment should be conducted prior to implementation of new regulations.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[7]

"Socioeconomic Contract Goal Setting Within the Department of Defense: Promises Still Unfulfilled," Dennis E. Black, Ph.D., CPCM, pp. 67-82.

The Federal Government uses the procurement system as a vehicle to correct the effects of past discrimination on certain socioeconomically disadvantaged groups. Since 1980, DOD and the civilian agencies have been required to establish annual goals for the award of contract dollars to these groups. In 1987, the National Defense Authorization Act set a DOD goal of five percent of contract dollars for minority concerns in Fiscal Years 1987 and 1989. This method of response to constituents is popular because it requires no budget allocation by Congress. The author theorized that this type of contract goal setting would fail, basically because the goals of the implementing agency did not coincide with those of the legislators.

The author analyzed eleven years of data on Government spending on targeted groups. The research revealed that the new contract goal setting established in 1980 did not result in increased dollars going to these groups. No evidence indicates that use of the procurement process to achieve non-procurement objectives is effective. However, some unintended negative consequences have resulted.

Tax benefits and profit incentives to encourage prime contractors to use small and disadvantaged firms as subcontractors would be better ways of encouraging SDB participation.

THEORETICAL, POSITIVE, EMPIRICAL, INDUCTIVE

[57]

"Engineers: Allies or Adversaries?," George C. Belev, CPCM, pp. 83-88.

The engineer is an extremely important member of the procurement team. Engineers are particularly valuable in three phases of the procurement process: development of the initial acquisition strategy, development of the Requests for Proposals (RFP), and evaluation of proposals.

In development of the initial acquisition strategy, the PCO develops integrated procurement plan, the source selection procedures and criteria, and determines the appropriate contract type. The engineer's commitment and expertise are vital in these areas. The engineer must focus not on the immediate, but on the big picture of the procurement process.

The RFP is the key document in the entire process. The engineer must tailor its technical documents to facilitate the procurement process. The specification must sufficiently document the requirement without unduly restricting competition. The cost estimate is also very important. It is used in programming funds and to judge the contractor's cost proposal.

The engineer is also indispensable in evaluation and negotiations.

The author concluded that to ensure a successful procurement, the PCO requires the dedicated assistance of the engineer. Without that assistance, the procurement will probably be unsuccessful.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, DEDUCTIVE

[23]

"Item Nonavailability: What Are Its Causes?," John J. Mulhern, Ph.D., pp. 89-94.

Nonavailability of items is becoming a high visibility issue as DOD encounters more difficulties in obtaining needed parts and materials for defense systems. There are many causes for the nonavailability. Manufacturing decline is certainly one. Another is lack of business incentives.

The Diminishing Manufacturing Sources and Material Shortages (DMSMS) program attempts to offer guidelines for programs facing these difficulties. Also, David Lamm and Elizabeth Tracy developed an analytical framework for

understanding the feasibility of certain corrective actions in response to this problem.

This article cited two cases of item nonavailability. The cases demonstrated material shortages resulting from behavioral and informational reasons. In one case, the firm chose not to do business with the Government. This was a behavioral reason for nonavailability. However, the parts the company no longer supplied existed under other stock numbers, so a shortage did not in fact exist. DOD did not immediately recognize this fact for informational reasons.

The author concluded that DOD must document cases of nonavailability so significant problems can be identified. DOD should not focus simply on manufacturing decline as the cause of nonavailability. There are informational and behavioral reasons as well.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [38]

"The Use of Project Management When Purchasing and Implementing a Hardware/Software System," Darryl L. Chuman, pp. 95-98.

Computer technology is so complex that vendors often decide for customers what is in the best interest of the customer. A customer may want to take this trusting approach if he truly has no idea what he needs. However, the prudent buyer would do better to gather a group of experts with knowledge in the technical, functional, financial, and contractual areas to serve on the acquisition team. Together, they should develop a plan to accomplish their mission. The author outlined ten steps to follow with the team in acquisition of computer systems. They are essentially the same steps involved in a standard negotiated procurement. The author concluded that the project management approach is the best one in hardware/software acquisition.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[69]

APPENDIX D

This appendix provides synopses of the articles published in the *National Contract Management Journal*, from Volume 23, Issue 1 (Summer 1989) through Volume 23, Issue 2 (Winter 1990).

Volume 23, Summer 1989, Issue 1

"Affording Defense: The Changes That Are Needed," Jacques S. Gansler, pp. 1-18.

This article identifies and discusses the broad changes required in the way the Department of Defense (DoD) conducts its business, if the United States is to maintain its national security posture. The objective of these changes must be the establishment of an affordable and effective national security posture.

First, the author discusses five earlier attempts at reforming the procurement system. Their effect is considered positive, but not successful. Second, the author discusses the mismatch that exists between the stated national security strategy, and the forces needed to implement it. He addresses this issue by suggesting several procedural, organizational, and cultural changes in the way force planning takes place. Third, he identifies basic problems in the current approach to weapons acquisition, and suggests seven changes to the acquisition process. Fourth, he sets forth a broad strategy, summarized in five points, for creating a healthy, responsive, and innovative defense industrial base. Finally, the author discusses how savings can be achieved through implementation of the required changes.

THEORETICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE

[50]

"The Use of Alternative Contract Types in Europe As Protection Against Overruns," W.A. Peeters and J. in't Veld, pp. 23-34.

Recent technological development contracts have proven traditional types of contracts have been inadequate for controlling expenditures. To remedy this, a number of intermediate types of contracts have been developed, most of which contain incentive provisions. Since most of these variants originated in the United States, a study was performed to analyze their application in Europe.

This article presents a general contract model that specifically addresses three primary contractual parameters (cost, schedule, and performance). A decision tree model is also presented that makes it possible to objectively select the most appropriate type of contract.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, INDUCTIVE [33]

"A Layman's Guide to the Federal Fraud Laws," Michael E. Failing, pp. 37-52.

The purpose of this article is to explain what the fraud laws mean and how they work. The subject is relevant because the Government is now treating conduct it did not consider criminal ten years ago as criminal conduct.

The author first discusses the general differences between the laws which govern commercial contracts. Next, specific areas of criminal fraud are discussed. These areas include false statements, concealment, false claims, mail and wire fraud, conspiracy to defraud, kickbacks, racketeer-influenced corrupt organizations (RICO), bribery, gratuities, conflicts of interest, collusive bidding, bid rigging, and price fixing.

The author concludes with a discussion of civil, contractual and administrative remedies for fraud. Additionally, Exhibit 1 of this article lists the various statutes relevant to the issue of criminal fraud.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [54]

"A Guide to Interpreting Contracts," Jerome S. Gabig and Charles L. Cook, pp. 55-61.

Many disputes involving contract interpretation remain unresolved between the parties because they do not understand, or are unaware of, the hierarchy that dictates which rule should prevail. The authors suggest that if the parties were aware of this hierarchy of rules, most disagreements would not digress to each side advocating a particular rule that would resolve the matter in its' favor.

This article explains the rules of contracts interpretation by profiling them in a hierarchy. The rules, in top-to-bottom hierarchy, are: (1) The Cardinal Rule, (2) the Whole Instrument Rule, (3) the Express Language Rule, (4) Conduct of the Parties, (5) Knowledge of the Other Parties Interpretation, (6) the Prior Course of Dealings Rule, (7) the Custom in the Trade Rule, (8) Miscellaneous Maxims, (9) Order of Precedence Clauses, and (10) Interpreted Against the Drafter. The authors' suggest a final "wild card" rule, (11) the Duty to Inquire Rule.

The authors conclude that the hierarchy of contract interpretation must be taken as a guide and applied under the proper circumstances.

PRACTICAL, NORMATIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC[28]

"The Government Contractor Defense: Its Implication in the Wake of Boyle v. United Technologies Corporation," Vincent J. Napoleon, pp. 65-73.

In **Boyle v. United Technologies Corporation (Boyle)**, the United States Supreme Court attempted to resolve debate over the applicability of traditional product liability principles, to the area of Government procurement law. The Court addressed the unsettled question of whether a Government contractor, who manufactures a defective product for the Government, may be insulated from liability for injuries sustained by the user of that product. Such insulation from liability is commonly referred to as the Government contractor defense.

This article examines the Supreme Court's decision in **Boyle**. The author first presents an overview of product liability. He then discusses the evolution of the Government contractor defense from its inception to the recent **Boyle** decision, focusing on the limits of the defense and the current state of law. Finally, the author examines the meaning of **Boyle** and its future impact on litigation of product liability actions against the Government.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE

[20]

"Commentary: Another Perspective on Boyle v. United Technologies Corporation," Barbara S. Kinosky, pp. 77-82.

In **Boyle v. United Technologies Corp (Boyle)**, the Supreme Court established what has been known as the "Government contractor defense." As the preceding article by Vincent J. Napoleon (see previous synopsis) explains, the Government contractor defense protects a Government contractor from liability, for acts it committed while complying with Government specifications during contract performance.

The purpose of this article is to demonstrate that the Government contractor defense has been established in case law, not by statute. This article discusses the impact of **Boyle** on recent court decisions.

The author first discusses the scope of **Boyle**, then what constitutes approval under **Boyle**. The Supreme Court decision insulates those contractors from liability in which the Government had made active decisions in the design of the equipment. However, it does not insulate the contractor to whom the Government has delegated design discretion.

The author then discusses the question of design defect versus defective manufacture. A recent Supreme Court decision demonstrates how the Court distinguishes design liability from defective manufacture liability. The author concludes that **Boyle**, while finally addressing the Government contractor defense, has left open more questions than it has answered.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [20]

"U.S. Congress Requires Limitations on Competition for Innovative Defense Contractors and Subcontractors," Robert A. Brunette, pp. 86-88.

This article discusses the issues and impact of Public Law 100-456, Incentives for Innovation. This law amended the 1984 Competition in Contracting Act (CICA) statutes. The new law generally prohibits the Department of Defense (DoD), from requiring that a prime contractor provide for competition between identical, privately developed items that are likely to be procured in substantial quantities over the life of the system. Its purpose is to ensure that contractors who rely on privately developed items in the products they offer to the Government, are not placed at a disadvantage in the proposal evaluation process for a DoD contract.

The author identifies two cases when the law allows an agency head to require competition between identical privately developed items. He discusses the impact of the law on Federal second-sourcing policy, and the historical background of CICA.

The author concludes this law is beneficial to innovative contractors and subcontractors. He urges innovative

subcontractors to obtain copies of prime contract solicitations, awards, and proposed subcontractor competition plans. The subcontractors should ensure these documents comply with the new law.

THEORETICAL, POSITIVE, NON-EMPIRICAL, DEDUCTIVE [60]

Volume 23, Winter 1990, Issue 2

"Spare Parts Procurement Within the Department of Defense: Separating Fact from Fiction," Curtis R. Cook, pp. 1-12.

This article addresses a key issue before Congress and the public -- the acquisition of spare parts by the Department of Defense (DoD). The author first presents an overview of spare parts acquisition. He describes spare parts as being classified into two categories -- initial and replenishment spares. He suggests the impact of spare parts horror stories undermines public confidence, ultimately with long-range consequences for U.S. security.

Next, he discusses three pricing practices -- cost allocation, small quantity orders, and formula pricing -- and their associated pitfalls. The author then addresses the political debate from four participant perspectives -- Congress, DoD, Industry, and the Press.

A discussion of various reforms initiated by DoD, Congress, and Industry is presented. The author identifies the practical effects of these reforms on such diverse areas as technical data review, sole-source justifications, increased contract publicity, increased proposal preparation time, and buyer education.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [24]

"Procurement Lead Time: The Forgotten Factor," James H. Perry, pp. 15-24.

The purpose of this article is to argue for the establishment of an active procurement lead time (PALT) management program within the Department of Defense (DoD). In presenting his argument, the author first examines PALT and lead time management in DoD and private sector environments. Lead time trends and conceptual foundations are discussed.

Next, the author presents evidence in support of his argument. Drawing on data collected from numerous private sector and DoD sources, empirical differences in aggregate PALT profiles are developed and analyzed. Using a sample of

several hundred items purchased by DoD and private sector firms from the same suppliers, specific PALT differences are developed. These differences are used to illustrate their impact on inventory investment.

Finally, this article discusses major DoD procurement management and inventory management policies and practices that have a negative impact on PALT. The author concludes by recommending revisions to DoD policies and procedures.

THEORETICAL, NORMATIVE, EMPIRICAL, INDUCTIVE [27]

"What is C/SCSC? -- In English, Please!" Donald L. Grskovich, pp. 25-32.

This article presents an overview of the Cost Schedule Control Systems Criteria (C/SCSC). C/SCSC came into being because the U.S. Government needed a way to reliably quantify the costs of planned procurements before they were started. The author first discusses the background and basics of C/SCSC, including the primary objectives of the program, implementing instructions, and acquisitions governed by the instructions.

Next, the author discusses three terms associated with C/SCSC. These terms are work breakdown structure (WBS), performance measurement base line (PMB), and earned value.

The author then describes how the 35 criteria identified in the instructions are grouped into five categories, followed by a comparison of C/SCSC versus conventional performance measurement. Finally, the author discusses four reports generated by the C/SCSC.

PRACTICAL, POSITIVE, NON-EMPIRICAL, NO PARTICULAR LOGIC [43]

"Newport News Shipbuilding and Dry Dock Company v. Reed (I, II, III): Did the DCAA Lose Its Fishing License, or Is It Running the Company?" Rocco Maffei, Jr., and William E. Porter, pp. 33-42.

This article is a legal analysis of the Defense Contract Audit Agency (DCAA) authority to access contractor records in the performance of audits. Cases are the focus of this analysis. The first case is **The United States v. Westinghouse Electric Corporation (Westinghouse)**; the second case is **Newport News Shipbuilding and Dry Dock Company v. Reed (I, II, III)**.

Westinghouse, decided in 1986, granted the Department of Defense Inspector General (DoDIG) specific authority to access a contractor's internal records. Following Westinghouse, the DCAA acted as if there was no limitation to its access to

records. Newport News (I, II, III), decided after Westinghouse, placed limitations on the DCAA's authority to access records.

Prior to discussing the litigation and decisions, the author describes the audit authority of the three primary audit agencies of the U.S. Government -- the DCAA, the DoDIG, and the General Accounting Office (GAO). The author concludes with a discussion of the impact of the case decisions.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [47]

"Environmental Liability: 'Uncertain Times' for Government Contractors," Robert T. Lee, pp. 45-51.

In today's climate of diminished defense priorities and increased environmental concern, it is no longer an excuse (if it ever was) to state that national defense requires an action that is environmentally harmful. Government contractors who are in noncompliance with environmental obligations are increasingly being targeted by environmental enforcers.

This article discusses a variety of environmental issues that affect Government contractors. First, the author discusses traditional environmental laws such as the Superfund Law, the Resource, Conservation, and Recovery Act (RCRA), and the Federal Clean Air and Clean Water acts. Second, he discusses several contract issues. The first area involves environmental compliance requirements in the contract itself. The second area concerns the extent to which the contractor can allocate to Government contracts costs associated with compliance, penalties and fines. Third, the author discusses litigation and civil and criminal enforcement. Finally, he concludes with a discussion of defenses and Government liability, the political climate, and Congressional initiatives.

THEORETICAL, POSITIVE, NON-EMPIRICAL, INDUCTIVE [57]

"Learning Needs of Contracting Personnel: Feedback From 62 Contracting Educators in a Crawford Slip Method Workshop," C.C. Crawford, Gilbert B. Siegel, and John A. Kerr, pp. 55-66.

This article reports the results of a workshop conducted to explore ways to remedy the current shortfall in contracting education. The workshop consisted of 62 educators, from universities and other organizations, with varying degrees of concern for either in-service or pre-service instruction. In a 30-minute period, the Crawford Slip Method elicited written responses on the targeting outline "Training Needs of Contracting Personnel." The researcher's initial

classification of the responses yielded about 60 categories of needs.

This article summarizes the results, and presents the responses, under a variety of contracting topics like Acquisition, Ethics, and Bids. A discussion on how to provide answers to learners is also presented.

PROFESSIONAL, POSITIVE, EMPIRICAL, INDUCTIVE

[23]

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c.1 A classification and
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